

DRAFT  
LEARNING FRAMEWORK  
CLASSES 11-12  
ECONOMICS



CO-CREATED BY CBSE-  
CENTRE FOR EXCELLENCE IN ASSESSMENT IN COLLABORATION  
WITH EDUCATIONAL INITIATIVES



## FOREWORD

The vision of the National Education Policy (NEP) 2020 released by the Government of India, directs that children not only learn, but more importantly learn how to learn. Education, must move towards less content, and more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields. Pedagogy must evolve to make education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centered, discussion-based, flexible, and, of course, enjoyable. The policy has a clear mandate for competency-based education (CBE) to enhance acquisition of critical 21st century skills by the learners. The first determinant for implementing CBE is a curriculum which is aligned to defined learning outcomes and that clearly states the indicators to be achieved.

The Central Board of Secondary Education (CBSE) has collaborated with Educational Initiatives, to develop the Learning Framework for English, Hindi, Mathematics, Physics, Chemistry, Biology, History, Geography, Economics, Accountancy, Business Studies and Computer Science in Grade 11 and 12. The Learning Frameworks comprise explicitly stated knowledge, skills and dispositions that an education system should try to achieve. These frameworks would help develop a common shared understanding among teachers, students and other stakeholders and would serve as a common benchmark for teaching, learning and assessment across the country.

These frameworks present indicators that are aligned to the CBSE curriculum and the NCERT learning outcomes. They further outline samples of pedagogical processes and assessment strategies to encourage curiosity, objectivity, creativity with a view to nurture scientific temper. This framework would be a key resource for teachers as they execute the curriculum. They have been developed to ensure that teachers align the learning to meet the set quality standards and also use it to track learning levels of students. The effort has been to synchronize focus on quality education with uniformity in quality of standards across CBSE schools.

We hope, these frameworks would not only become a reference point for competency-based education across the country but also facilitate planning and design of teaching-learning processes and assessment strategies by teachers and other stakeholders.

Any feedback regarding the framework is welcomed.

*CBSE Academic Unit*

## PREFACE

The National Education Policy 2020 has outlined the importance of competency-based education in classrooms, leading to curricular and pedagogical reforms in the school systems. The policy emphasizes on the development of higher order skills such as analysis, critical thinking and problem solving through classroom instructions and aligned assessments. These skills are important indicators which will further the dissemination of pedagogy and learning outcomes across schools and boards.

In order to propagate indicator-based learning through 'Learning Frameworks', the Central Board of Secondary Education has collaborated with Educational Initiatives (Ei). Learning frameworks are a comprehensive package which provides learning outcomes, indicators, assessment frameworks, samples of pedagogical processes, tools and techniques for formative assessment, blueprint, assessment items and rubrics. 12 such frameworks have been developed for English, Hindi, Mathematics, Physics, Chemistry, Biology, History, Geography, Economics, Accountancy, Business Studies and Computer Science in Grade 11 and 12.

The frameworks are adopted from the learning outcomes outlined in the NCERT which are mapped to key concepts of the content. These content domain specific learning outcomes are broken down into indicators which defines the specific skills a learner needs to attain. A clear understanding of these LOs will be immensely helpful for teachers and students to learn better. This document will help teachers to focus on skills of the subject in addition to concepts.

The National Council of Educational Research and Training (NCERT) textbook states "We must recognise that, given space, time and freedom, children generate new knowledge by engaging with the information passed on to them by adults. Treating the prescribed textbook as the sole basis of examination is one of the key reasons why other resources and sites of learning are ignored. Inculcating creativity and initiative is possible if we perceive and treat children as participants in learning, not as receivers of a fixed body of knowledge.". This framework will help teachers to design learning which has outcomes and indicators that focuses on the skills Economics aims to achieve through its syllabus. In addition to this, sample pedagogical processes, formative assessment strategies and summative assessment items are also provided to enable teachers to make the maximum use of this framework. As per NCERT Learning Outcomes for Higher Secondary Stage, "Economic reality in India and worldwide has undergone significant changes in the last decade. New issues and new ways of perceiving these issue and policies responses has emerged recently. There is also at the level of discipline of economics – a strong sense of introspection enforced by development in both advanced countries and Indian Economy. Together these necessitate relook at the way economics is to be taught and learnt at the secondary level.Finally with the explosion of media the discourse on the economy has reached a new level of sophistication. It is imperative that school students today are in a position to captured the contemporary discourse. After going

through the course in economics student will be able to develop skills to explore argue logically with reasoning, draw confusion conclusion & communicate on economic ideas & decisions.

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## 2. NATURE OF THE SUBJECT

At present, at the higher Secondary Stage, there are 4 textbooks in Economics. These are 'Statistics for Economics' and 'Introductory Microeconomics' for Class XI, and 'Indian Economic Development' and 'Introductory Macroeconomics' for Class XII. Thus, the course at the higher secondary stage is a combination of economic theories and their application in the real situation of Indian Economy. The application of theories may require some of the statistical tools for analysis; hence, Statistics. However, over the years, the experience gained from various research, training programmes, field visits and analysis of assessment in the subject suggests that these four books appear to be in watertight compartments and the linkage between them is not clear to the learners. This is more pronounced in the case of 'Statistics for Economics' where the applicability of the statistical tools and techniques to the Indian economic issues discussed in the other three textbooks is not evident.

Economics is one of the social sciences, which has great influence on every human being. As economic life and the economy go through changes, the need to ground education in children's own experience becomes essential. While doing so, it is imperative to provide them opportunities to acquire analytical skills to observe and understand the economic realities.

At senior secondary stage, the learners are able to understand abstract ideas, exercise the power of thinking and to develop their own perception. It is at this stage; the learners are exposed to the rigour of the discipline of economics in a systematic way.

The economics courses are introduced in such a way that in the initial stage, the learners are introduced to the economic realities that the nation is facing today along with some basic statistical tools to understand these broader economic realities. In the later stage, the learners are introduced to economics as a theory of abstraction. The issues of Indian economy and world economy are integrated with the content of the textbooks. The essential tools of statistics and mathematics needed for analysis is also integrated. The objective of such restructuring is to enable the learners to understand the relevance of the economic theories and their application by using the statistical and mathematical skills, as appropriate.

The economics courses also contain many projects and activities. These will provide opportunities for the learners to explore various economic issues both from their day-to-day life and also from issues, which are broader and invisible in nature. The academic skills that they learn in these courses would help to develop the projects and activities. The syllabus is also expected to provide opportunities to use information and communication technologies to facilitate their learning process.



### 3. STAGE SPECIFIC CURRICULAR EXPECTATIONS

Learning Outcomes at Higher Secondary stage developed by National Council for Educational Research and Training (NCERT) mentions the following curricular expectations for Economics.

- CE1. Develop themselves as responsible citizen of the country
- CE2. Understand concepts, processes, terms, facts of economy
- CE3. Apply the knowledge of economy to take informed decision
- CE4. Describe various level of economic activities
- CE5. Understand the contemporary challenges faced by the economy
- CE6. Appreciate diversity including inclusiveness
- CE7. Develop skills to explore argue logically with reasoning, draw conclusion & communicate on economic ideas & decisions

#### 4. CONTENT DOMAINS

The content for Economics for grades 11-12 in CBSE curriculum has been organized around content units. Content units for the two grades, along with the chapters from the NCERT textbooks are mentioned in the tables below.

**Table I. Grade 11 Content units and textbook chapters**

Content units	NCERT textbook chapters
<b>Textbook – Introductory Microeconomics</b>	
<b>I. Introduction</b>	1. Introduction
<b>II. Consumer's Equilibrium and Demand</b>	2. Theory of Consumer Behaviour
<b>III. Producer Behaviour and Supply</b>	3. Production and Costs
<b>IV. Forms of Market and Price Determination under perfect competition with simple applications</b>	4. The Theory of the Firm under Perfect Competition
	5. Market Equilibrium
<b>Textbook – Statistics for Economics</b>	
<b>I. Introduction</b>	1. Introduction
<b>II. Collection, Organisation and Presentation of Data</b>	2. Collection of Data
	3. Organisation of Data
	4. Presentation of Data
<b>III. Statistical Tools and Interpretation</b>	5. Measures of Central Tendency
	6. Correlation
	7. Index Numbers
	8. Use of Statistical Tools



**Table II. Grade 12 Content units and textbook chapters**

<b>Content units</b>	<b>NCERT textbook chapters</b>
<b>Textbook - Introductory Macroeconomics</b>	
<b>I. National Income and Related Aggregates</b>	1. Introduction
	2. National Income Accounting
<b>II. Money and Banking</b>	3. Money and Banking
<b>III. Determination of Income and Employment</b>	4. Determination of Income and Employment
<b>IV. Government Budget and the Economy</b>	5. Government Budget and the Economy
<b>V. Balance of Payments</b>	6. Open Economy Macroeconomics
<b>Textbook – Indian Economic Development</b>	
<b>VI. Development Experience (1947-90) and Economic Reforms since 1991</b>	1. Indian Economy on the Eve of Independence
	2. Indian Economy 1950-1990
	3. Liberalisation, Privatisation and Globalisation: An Appraisal
<b>VII. Current Challenges facing Indian Economy</b>	4. Human Capital Formation in India
	5. Rural Development
	6. Employment: Growth, Informalisation and other Issues
	7. Environment and Sustainable Development
<b>VIII. Development Experience of India – A Comparison with Neighbours</b>	8. Comparative Development Experiences of India and its Neighbours

## 5. SUBJECT SPECIFIC COGNITIVE DOMAINS

“As the Board is progressively allowing more space to 'learning outcome based' assessment in place of textbook driven assessment, question papers of Board examinations will have more questions based on real-life situations requiring students to apply, analyse, evaluate and synthesize information as per the stipulated outcomes. The core-competencies to be assessed in all questions, however, will be from the prescribed syllabus and textbooks recommended therein. This will eliminate predictability and rote learning to a large extent.”  
CBSE Curriculum for classes 11-12]

### CATEGORIES OF COGNITIVE DOMAINS

Revised Bloom's taxonomy (Anderson and Krathwohl, 2001) of cognitive process dimension has six categories, each associated with a set of specific cognitive processes. CBSE curriculum intends to have a balance of these categories of intellectual tasks in the teaching-learning and assessment of learning of a subject. These six categories as described in the revised Bloom's taxonomy, with their specific cognitive processes, are mentioned below.

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#### COGNITIVE DOMAIN – REMEMBER

**'Remember'** involves retrieving relevant knowledge from long-term memory. **Recognising** and **recalling** are the specific cognitive skills associated with this cognitive domain. Asking students to provide definition of a concept, e.g. List the features of a centrally planned economy.

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#### COGNITIVE DOMAIN – UNDERSTAND

**'Understand'** involves 'constructing meaning from instructional messages, including oral, written and graphic communication'. **Interpreting, exemplifying, classifying, summarizing, inferring, comparing, explaining** are the specific cognitive skills associated with this cognitive domain. Asking students to explain a phenomenon in terms of physical concepts/principles, e.g. Explain how marginal rate of substitution is derived from an indifference curve.

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### COGNITIVE DOMAIN – **APPLY**

**‘Apply’** involves carrying out or using a procedure in a given situation. **Executing** and **implementing** are the specific cognitive skills associated with this cognitive domain. Assessment tasks wherein students have to use the knowledge and/or procedures to solve a problem or to arrive at a decision in a given real-life situation cover this cognitive domain. e.g. What is a rational consumer assumption in economics?

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### COGNITIVE DOMAIN – **ANALYSE**

**‘Analyse’** involves breaking material into constituent parts and determining how parts relate to one another and to an overall structure and purpose. **Differentiating, organising** and **attributing** are the specific cognitive skills associated with this cognitive domain. Asking students to compare and explain the relationship between two physical quantities from the same content domain, e.g. When can a central bank create more money in the economy? What is the immediate impact of this?

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### COGNITIVE DOMAIN – **EVALUATE**

**‘Evaluate’** involves making judgments based on criteria and standards. **Checking** and **critiquing** are the specific cognitive skills associated with this cognitive domain. Assessment tasks that require a deeper level of understanding wherein students are required to provide justification for their choice, e.g. Compare the barter system to the currency system by weighing the pros and cons of each.

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### COGNITIVE DOMAIN – **CREATE**

**‘Create’** involves putting elements together to form a coherent or functional whole; or reorganising elements into a new pattern or structure. **Generating, planning** and **producing** are the specific cognitive skills associated with this cognitive domain. Tasks that require students to produce new artefacts based on what they have learnt, e.g. Construct a budget line of a consumer, given her budget and the prices of the two goods she consumes.

## KINDS OF ASSESSMENT TASKS FOR DIFFERENT COGNITIVE DOMAINS

Some more examples of kinds of assessment tasks that can be associated with the different cognitive domains are given below. The following list should be taken as an indicative not an exhaustive one.

**Table III. Cognitive Domains and assessment tasks**

<b>Cognitive domain</b>	<b>Assessment tasks</b>
<b>Remember</b> <ul style="list-style-type: none"><li>• recognising</li><li>• recalling</li></ul>	<ul style="list-style-type: none"><li>• defining terms crucial to understanding of micro and macroeconomics</li><li>• recalling theories</li></ul>
<b>Understand</b> <ul style="list-style-type: none"><li>• interpreting</li><li>• exemplifying</li><li>• classifying</li><li>• summarizing</li><li>• inferring</li><li>• comparing</li><li>• explaining</li></ul>	<ul style="list-style-type: none"><li>• interpreting balance sheets</li><li>• comparing monopoly and free markets</li><li>• explaining various taxes and their role for the individual and the government</li><li>• Explaining the type of competition between Burger King and McDonald's who have similar market and offer similar products and services</li></ul>
<b>Apply</b> <ul style="list-style-type: none"><li>• executing</li><li>• implementing</li></ul>	<ul style="list-style-type: none"><li>• formulating the revenue deficit of an economy</li></ul>
<b>Analyse</b> <ul style="list-style-type: none"><li>• differentiating</li><li>• organising</li><li>• attributing</li></ul>	<ul style="list-style-type: none"><li>• differentiating between final and intermediate goods in different situations</li><li>• analysing the process of demonetisation of 2016.</li><li>• Evaluating how mismanaged government finances, ill-timed tax cuts and pandemic led Sri Lankan economy to face one of its worst ever economic crisis in 2022</li></ul>
<b>Evaluate</b>	<ul style="list-style-type: none"><li>• evaluating the success of different economic policies in the country. e.g. land ceiling policy on agriculture</li></ul>

<ul style="list-style-type: none"> <li>• checking</li> <li>• critiquing</li> </ul>	
<b>Create</b> <ul style="list-style-type: none"> <li>• generating</li> <li>• planning</li> <li>• producing</li> </ul>	<ul style="list-style-type: none"> <li>• creating a balance sheet for a bank</li> <li>• planning a scheme like MNREGA, but based on caste</li> <li>• Plan a roadmap of a business venture by analysing and evaluating public policies of a hypothetical developing country</li> </ul>

### SAMPLE TASKS FROM DIFFERENT COGNITIVE DOMAINS SPECIFIC TO A CONTENT UNIT

Some specific examples of tasks from different cognitive domains are described below for two content chapters from classes 11 and 12 NCERT Economics textbooks. A chapter may not always cover all six cognitive domains. The following list of tasks should be taken as an indicative list not a comprehensive one.

#### CHAPTER 3 – CLASS 11

**Table IV: Chapter 3. Production and Costs – Class:11**

Cognitive domain	Sample tasks
Remember	<ul style="list-style-type: none"> <li>• Define cost of production.</li> <li>• State the law of variable proportions.</li> </ul>
Understand	<ul style="list-style-type: none"> <li>• Using a model, show that production is a function of the quantity of inputs.</li> </ul>
Apply	<ul style="list-style-type: none"> <li>• The average product with 10 workers is 21, while that with 20 workers is 42. What kind of production task can cause this effect? Give an example.</li> </ul>
Evaluate	<ul style="list-style-type: none"> <li>• Given all else is equal, which model will be more profitable as output increases – a fixed cost model or a variable cost model?</li> </ul>



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## CHAPTER 7 – CLASS 12

**Table V: Chapter 7. Employment: Growth, Informalisation and other Issues – Class:12**

Cognitive domain	Sample tasks
Remember	<ul style="list-style-type: none"><li>• Define: Worker</li><li>• Define: Worker-population ratio</li></ul>
Understand	<ul style="list-style-type: none"><li>• Elucidate the reasons for the differences in the workforce distribution in urban and rural areas of India.</li></ul>
Apply	<ul style="list-style-type: none"><li>• In India, human labour is moving from agriculture to industry and services. How does one justify this as an economist?</li></ul>
Analyse	<ul style="list-style-type: none"><li>• The highest worker concentration in India is in the primary sector. What are the macroeconomic factors that have led to this pattern?</li></ul>
Evaluate	<ul style="list-style-type: none"><li>• Evaluate the differences between the support formal workers get and the support informal workers get. Why do these differences exist?</li></ul>
Create	<ul style="list-style-type: none"><li>• What are three steps that the government can take to decrease unemployment? What are likely to be the unintended impact of each of these steps?</li></ul>

## 6. LEARNING OUTCOMES

“Competency based Learning focuses on the student’s demonstration of desired learning outcomes as central to the learning process. Learning outcomes are statements of abilities that are expected students will gain as a result of learning the activity. Learning outcomes are, thus, statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning. Therefore, the focus is on measuring learning through attainment of prescribed learning outcomes, rather than on measuring time.”  
[Senior School Curriculum, CBSE]

Following learning outcomes for senior secondary stage developed by National Council for Educational Research and Training (NCERT) state important knowledge, skills and dispositions students need to attain at the end of an academic year in classes 11 and 12 in the context of learning Economics.

### CLASS 11 LEARNING OUTCOMES FOR ECONOMICS

Learner will be able to:

- (1) Examine the foundation of an economy and inquires the basic economic problems
- (2) Explain the nature, scope and methodology of economics and find out the difference between micro and macroeconomics
- (3) Discuss the three central problems of an economy and how does it determine the resource allocation-what, how and for whom to produce
- (4) Describe the movement along a PPC and opportunity cost and shifts its economy’s PPC to the right or left and is caused by changes in investment, technology
- (5) Analyse and explain how the opportunity cost influence the decision made by the consumer and producer
- (6) Illustrate decision making and problem-solving skills related to consumers satisfaction and analyse the theory of demand and supply
- (7) Discuss consumer equilibrium with the help of indifference curve
- (8) Draw a demand curve, supply curve and how is it used to illustrate movement, extension, contraction in demand and supply
- (9) Explain elasticity of demand and supply
- (10) Demonstrates inquisitiveness and raise questions related to market equilibrium
- (11) Describe advantages and disadvantages of market economic system.

- (12) Explain market equilibrium, draw and interpret demand and supply schedules and curves used to identify disequilibrium prices and shortages (demand more than the supply) and excesses (supply more than the demand)
- (13) Demonstrate the role of Government in overcoming the limitations of market system
- (14) Discuss the effectiveness of government intervention in overcoming the drawbacks of a market system
- (15) Explain firms' costs and revenue goals-using total, average and marginal, total cost (TC), average total cost (ATC), fixed cost (FC), variable cost (VC), average fixed cost (AFC), average variable cost (AVC) and MC
- (16) Explain total revenue (TR), average revenue (AR) and marginal revenue (MR)
- (17) Evaluate the forms of market to maximize consumers satisfaction and produces profit
- (18) Explain competitive markets and use diagram to show the effect of large number of firms on price, quantity, choice and profit
- (19) Explain monopoly markets- its characteristics, advantages and disadvantages

#### CLASS 12 LEARNING OUTCOMES FOR ECONOMICS

- (1) Inquires money, types of money and functions of banks
- (2) Describe the forms, function and characteristics of money
- (3) Discuss the role and importance of central banks and commercial banks for government, consumer and producers
- (4) Analyse and interpret data related to various issues/events related to Indian economy
- (5) Discuss critical issues of the Indian economy since independence
- (6) Evaluate five-year plan and the role of NITI Ayog in planning, allocation of funds to various sectors like agriculture, industry, services for the specific cases such as removal of poverty and unemployment
- (7) Investigate the relationship between India and its neighbours
- (8) Explain the macroeconomic events in India and neighbouring countries and visualize the economic future of India
- (9) Explain and suggest measures for the determination of income and employment
- (10) Discuss aggregate demand and aggregate supply, propensity to consume and propensity to save (average and marginal) and measures to correct excess and deficient demand
- (11) Discuss wage determination, the influence of demand and supply, relative bargaining strength and government policy, including the fixation of minimum wage; basic concepts relating to employment such as economic activity, worker, workforce and unemployment and distinguishes between disguised and seasonal unemployment

- (12) Describe the role of government with respect to economic growth, full employment/low unemployment, stable prices/low inflation, equilibrium in the balance of payment, redistribution of income
- (13) Emphasize economic decisions by highlighting the role of government
- (14) Explain budget and reason out the main areas of government spending and its impact on those areas
- (15) Discuss the role of government in an economy through budgetary process and different types of taxes
- (16) Discuss fiscal policy measures with respect to change in tax and spending, that cause balance or imbalance budget and calculate the size of a budget deficit or surplus
- (17) Discuss monetary policy measures with respect to change in interest rates, money supply and foreign exchange rates
- (18) Communicate economic information and ideas related to National income, Human development index and sustainable development
- (19) Explain gross domestic product (GDP) can be used to measure economic growth
- (20) Discuss the three methods of measuring the National Income
- (21) Describe the limitations of using GDP as an indicator of development
- (22) Examine alternative indicator of development and use Human Development Index as a case study
- (23) Discuss the strategies adopted for sustainable development in India
- (24) Predict and evaluate the challenges facing Indian economy
- (25) Explain a few important economic challenges facing Indian economy using statistical evidence
- (26) Discuss the need and main features of liberalization, globalization and privatization
- (27) Analyse reasons for change and consequences of trade with other countries
- (28) Discuss the role of multinational companies (MNCs) and the costs and benefits to their host and home countries and the role of government in regulating the economic activities in an economy
- (29) Differentiate between floating and the fixed system
- (30) Analyse the demand for and supply of a currency in the foreign exchange market
- (31) Define and explain a few important terms and concepts associated with balance of payments in Indian context

## 7. CONTENT DOMAIN SPECIFIC LEARNING OUTCOMES AND INDICATORS

The learning outcomes defined by NCERT are generic and broadly defined for the content defined in the curriculum. They articulate the discipline-specific skills that students need to attain through learning different concepts in the syllabus. A clear understanding of the scope of these learning

outcomes for each concept dealt in the NCERT textbook chapters will be very helpful for both teachers and students in planning teaching and learning better. The following process has been followed to list out the content domain specific learning outcomes (CLOs) and indicators for all the content units and textbook chapters.


Concepts discussed in the textbook chapters were mapped to key concepts under each content domain in the CBSE syllabus.



Relevant NCERT learning outcomes were identified for each key concept in the chapter.



Content domain specific learning outcomes (CLO) were defined for the NCERT learning outcomes relevant for the chapter. The cognitive process in the NCERT learning outcome and the CLO is the same.



Each CLO was broken down into specific learning indicators called as 'Indicator' which defines the specific skill or knowledge that a student needs to attain. The cognitive process addressed in Indicators may be same or lower than the cognitive process addressed in CLO.

## CLASS 11 CONTENT DOMAIN SPECIFIC LEARNING OUTCOMES AND INDICATORS

**Table VI: Content domain specific learning outcomes and indicators – Class:11**

Unit and chapter	Key concept	NCERT Learning Outcomes (LOs)	Content domain specific Learning Outcomes (CLOs)	Indicators
Textbook: Statistics for Economics				
<b>Unit 1</b> 1. Introduction	Definition of Statistics	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO1. Explains importance of studying Economics	C1. States why study the subject Economics
				C2. Defines the different terms such as who is a consumer, seller, and producer.
				C3. States who is the founder of Modern Economics and what was the definition given by the founder
	Consumption, Production and Distribution	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO2. Explains meaning and scope of Economics	C4. Explains what scarcity and the different forms of scarcity is.
				C5. Gives a brief description of the term Production, Consumption and Distribution.
				C6. States what the three parts of the economy.
	Statistics in Economics	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO3. Describe the role of statistics in Economics	C7. Defines the subject economics in the definition used by many economists.
				C8. Explains what economic data is.
				C9. Elucidates what are economic policies and the ways to analyse them.

				C10.Examines the definition of the term Statistics and the various uses of statistics in different subjects.
				C11.Mentions how statistics is used in the subject Economics.
Unit 2  2.Collection of Data	Collection of Data	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL04. Explains the meaning and purpose of data collection	C12.Infers how variables of the data provide important information.
	Sources of Data	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL05. Distinguishes between primary and secondary sources	C13.Compares primary and secondary data with an example.
			CL06. Explains the different modes of collection of data	C14.Articulates how surveys can be used for data.
				C15.Differentiates the importance of close-ended and open-ended Questions in a Questionnaire.
	Mode of data collection	LO4. Analyse and interpret data related to various issues/events related to Indian economy		C16.Examines the advantages and disadvantages of different methods of data collection.
				C17.Suggests the most appropriate method of data collection for a particular survey.
	Census and Sample Surveys	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL07. Distinguishes between census and sample surveys	C18.Reasons the significance of pre-testing after the completion of the Questionnaire.
				C19.Explains the purpose and process of a census.

				C20. Defines population and representative sample for accurate data in a survey.
			CLO8. Describes sampling and their different techniques	C21. Distinguishes random and non-random sampling based on the chances of getting represented.
				C22. Applies the method of selecting representative in random sampling.
				C23. Analyses the data from random sampling to make predictions.
	Sampling And Non-Sampling Errors	LO4. Analyse and interpret data related to various issues/events related to Indian economy		C24. Calculates sampling errors using central tendency and dispersions.
	Census of India	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO9. Enlists different organisations that are important sources of secondary data	C25. Differentiates the different types of non-sampling errors.
<b>Unit 2</b> 3.Organisation of Data	Raw Data	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO10. Explains the meaning of raw data	C26. Predicts economic and social issues using the data collected from the Census of India.
				C27. Collects raw data from a particular event.
	Classification of Data	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO11. Classifies the data for further statistical analysis	C28. Tabulates raw data in no order.
				C29. Articulates the importance of classifying data.
				C30. Differentiates between all the different forms of classification of data.



	Variables	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL012. Describes the meaning and types of variables.	C31. Justifies the categorization of variables into continuous and discrete.
				C32. Distinguishes a given set of variables into Continuous and Discrete.
	Frequency Distribution	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL013. Prepares a frequency distribution Table	C33. Executes the technique of frequency distribution.
			CL014. Understands the technique of forming classes	C34. Explains the different components of class limits.
				C35. Calculates the class mark of a given set of data.
				C36. Tabulates a set of data pointing out the class limits and class marks of the same.
				C37. Points out the different factors considered while tabulating the frequency distribution.
				C38. Rationalises their choice for using a particular type of class interval based on a given set of data.
			CL015. Explains frequency graphs	C39. Analyses the difference between frequency graphs of equal and unequal class data distribution.
			CL016. Explains frequency array	C40. Explains the concept of frequency array.
	Bivariate Frequency Distribution	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL017. Differentiates between univariate and bivariate frequency distributions.	C41. Demonstrates their understanding of bivariate

				frequency distribution through examples.
<b>Unit 2</b>  4.Presentation of Data	Data representation	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO18. Presents the data in various ways	C42.Enlists the different forms of data representation.
	Textual Presentation of Data	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO19. Presents the data in textual way	C43.Explains the drawbacks of textual presentation of data.
	Tabular Presentation of Data		CLO20. Presents the data using tables	C44.Visually represents different types of tabular presentation of data.
	Tabulation Of Data and Parts of a Table			C45.Demonstrates their understanding of parts of a table by tabulating a given set of data.
	Diagrammatic presentation of Data	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO21. Presents data using geometric forms	C46.Reviews the choice of using different types of diagrams for given data sets.
				C47.Diagrammatically represents data sets in different types of data diagrams.
				C48.Analyses a given statistical diagram and make recommendations for the same.
			CLO22. Presents data using a frequency diagram	C49.Assesses the benefits of using a histogram.
				C50.Explains the concept of Ogives.

<b>Unit 3</b>  5.Measures of Central Tendency	Central Tendency	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO23. Explains different forms of central tendency	C51.Enlists the different forms of statistical measures of central tendency.
	Arithmetic Mean	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO24. Describes the role and methods of calculating arithmetic mean for various kinds of data	C52.Calculates the arithmetic mean using data in the simplest form
				C53.Calculates arithmetic mean for grouped data
				C54.Calculates arithmetic mean of ungrouped data
				C55.Calculates the arithmetic mean of a given set of grouped data using the step deviation method.
				C56.Calculates the arithmetic mean of a given set of grouped data using the assumed mean method.
				C57.Analyses the significance of assigning weight to a given set of data in order to calculate arithmetic mean.
	Median	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO25. Describes the role and methods of calculating median for various kinds of data	C58.Defines median.
				C59.Computes median for a given set of various types of data sets.
				C60.Identifies quartiles of a given set of data.
				C61.Infers the application of percentile to calculate median.

	Mode		CL026. Describes the role and methods of calculating mode for various kinds of data	C62. Analyses the importance of using mode.
				C63. Calculates mode for a given set of discrete series.
				C64. Calculates mode for a given set of continuous series.
				C65. Assesses the choice of average calculation method for a set of given events.
<b>Unit 3</b> 6. Correlation	Types of Relationships	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL027. Explains the nature of relationship between two variables	C66. Analyses the importance of measuring the relationship between 2 variables in economics.
			CL028. Understands the method of correlation	C67. Enlists examples where study of relationship between variables is important.
	Techniques For Measuring Correlation	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL029. Explains the methods of measuring correlation	C68. Explains the concept of correlation.
				C69. Describes the application of the 3 different techniques of measuring correlation.
	Scatter Diagram	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL030. Measures correlation using scatter diagram	C70. Evaluates the relationship of given 2 sets of variables using Scatter Diagram.
				C71. Graphically represents the different types of correlations 2 variables can have.
	Karl Pearson's coefficient of Correlation	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL031. Understands the usage of Karl Pearson's coefficient of correlation to linear	C72. Evaluates the efficiency of using Karl Pearson's coefficient of Correlation.

			relationship between variables	C73. Calculates the correlation between variables using the Karl Pearson's coefficient of correlation.
				C74. Explains the step deviation method to calculate correlation coefficient.
	Spearman's Rank Coefficient Technique	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CL032. Understands the usage of Spearman's rank correlation to measure the relationship between variables	C75. Assesses situations when Spearman's Rank Coefficient Technique is used.
				C76. Ranks the three different methods of calculation of correlation based on accuracy.
				C77. Applies suitable method for the calculation of ranks of correlation of a given set of data.
<b>Unit 3</b> 7.Index Numbers	Index Number	LO24. Explain how inflation is measured using the different index numbers	CL033. Explains the meaning of index number	C78. Explains the concept of Index Number.
				C79. Summarises the importance of using Index Number.
	Construction of Index Numbers	LO24. Explain how inflation is measured using the different index numbers	CL034. Explains the aggregative method of constructing index number	C80. Explains the concept of price index.
				C81. Calculates the price index using the Simple Aggregative Price Index.
				C82. Analyses the limitations of using Simple Aggregate Price Index.

				C83. Describes the relevance of using Weighted Aggregate Price Index.
			CLO35. Explains the averaging method of constructing index number	C84. Modifies the values of weighted and unweighted price indexes to calculate the weighted price relative index.
				C85. Distinguishes between the computation of volume index and value index.
	Some Important Index Numbers	LO24. Explain how inflation is measured using the different index numbers	CLO36. Explains consumer price index	C86. Explains the application of consumer price index.
			CLO37. Explains wholesale price index	C87. Explains the concept of Wholesale Price Index
				C88. Differentiates between Consumer Price Index and Wholesale Price Index.
			CLO38. Explains industrial production index	C89. Explains the concept of Industrial Product Index.
			CLO39. Explains human development index	C90. Points out the importance of Human Development Index.
			CLO40. Explain the role of SENSEX	C91. Infers the importance of SENSEX for the Indian Economy.
	Issues in the Construction of Index Numbers	LO24. Explain how inflation is measured using the different index numbers	CLO41. Enlists the problems with construction of an index number	C92. Lists the important factors affecting the calculation of price index.
				C93. Infers the degree of data reliability of two given sets of data.

				C94. Evaluates the relevance of calculating the various price indexes in economics.
<b>Unit 3</b> 8.Use of Statistical Tools	Steps of Designing a Project	LO4. Analyse and interpret data related to various issues/events related to Indian economy	CLO42. Understands the steps of designing a project	C95. Creates a flow chart for all the steps needed towards designing a project.
				C96. Identifies an economic event/ problem they will be studying.
				C97. Identifies an appropriate target group for the study for their event.
				C98. choose the most appropriate source of data for their research.
				C99. Creates an appropriate set of questionnaires to collect data.
			CLO43. Explains the usage of different statistical tools to study a given problem	C100. Applies various statistical tools in order to analyse the problem.
			CLO44. Understands the steps of designing a project	C101. Interprets the results of the problem and come to a conclusion.
				C102. Predicts future prospects and solutions for the problem/event they have researched on.
				C103. Creates a bibliography to Enlists all their sources of information.
				C104. Presents their observations and Suggestions in a project

				report form
Textbook: Introductory Microeconomics				
Unit 1 1. Introduction	Simple Economy	LO1. Examine the foundation of an economy and inquires the basic economic problems	CL045. Defines simple economy	C105. Explains a simple economy.
			CL046. Analyses the role of goods and services	C106. Differentiates between goods and services.
				C107. Explains scarcity of resources.
	Central Problems of an Economy	LO3. Discuss the three central problems of an economy and how does it determine the resource allocation-what, how and for whom to produce	CL047. Describes problems of economy	C108. Assesses the central problems of an economy.
		LO4. Describe the movement along a PPC and opportunity cost and shifts its economy's PPC to the right or left and is caused by changes in investment, technology	CL048. Plots the production possibility curve	C109. Illustrates the functioning of a production possibility curve (PPC)
		LO5. Analyse and explain how the opportunity cost influence the decision made by the consumer and producer	CL049. Describes opportunity cost	C110. Explains why opportunity cost arises.
				C111. Explains the disadvantages of a simple economy.
	Organization of Economic Activity	LO1. Examine the foundation of an economy and inquires the basic economic problems	CL050. Describes centrally planned economy	C112. Critically analyses a centrally planned economy.
			CL051. Explains market and mixed economy	C113. Critically analyses a market economy.
				C114. Rationalizes the existence of a mixed economy.



				C115. Evaluates if India is a centrally planned economy or a market economy or a mixed economy.
			CL052. Explains different types of economy	C116. Identifies the three types of economies in today's world.
				C117. Enlists the defining characteristics of a market.
	Positive and Normative Economics	LO2. Explain the nature, scope and methodology of economics and find out the difference between micro and macroeconomics	CL053. Analyses positive and normative economies	C118. Differentiates between positive and normative economics.
			CL054. Differentiate micro- and macro-economics	C119. Compares macro and microeconomics.
Unit 2 2. Theory of Consumer Behaviour	Utility and its types.	LO7. Discuss consumer equilibrium with the help of indifference curve	CL055. Explains utility and its types.	C120. Describes consumer choices and utility.
				C121. Explains types of utility.
				C122. Explains the role and importance of marginal utility.
				C123. Rationalizes the existence of ordinal utility analysis.
	Budget Set and Budget Line		CL056. Explains budget set and budget line.	C124. Describes budget set and budget line.
				C125. Analyses the changes in budget line.
	Optimal Choice of a Consumer		CL057. Explains consumer choice.	C126. Describes the choices of consumers in economics.
	Demand: Curve, elasticity and Market Forces.	LO8. Draw a demand curve, supply curve and how is it used to illustrate movement, extension, contraction in demand and supply	CL058. Explains the concept of demand.	C127. Describes demand using indifference curve.
				C128. Explains the changes in demand curve.
				C129. Outlines the role of market demand.

				C130. Describes the elasticity of demand.
				C131. Analyses the factors affecting the elasticity of demand.
	Inferior Goods and Normal Goods	LO6. Illustrate decision making and problem-solving skills related to consumers satisfaction and analyse the theory of demand and supply	CLO59. Differentiates between inferior and normal goods.	C132. Explains inferior and normal goods.
	Substitutes and Complements	LO8. Draw a demand curve, supply curve and how is it used to illustrate movement, extension, contraction in demand and supply		C133. Describes income and substitution effects.
<b>Unit 3</b> 3. Production and Costs	Firms	LO17. Explain firms' costs and revenue goals-using total, average and marginal, total cost (TC), average total cost (ATC), fixed cost (FC), variable cost (VC), average fixed cost (AFC), average variable cost (AVC) and MC	CLO60. Describes the objectives of firms	C134. Describes substitute goods and complementary goods.
	Production Function		CLO61. Explains the production function of a firm	C135. Defines the cost of production, revenue, and profit of a firm.
				C136. Defines the production function for a firm.
				C137. Models how a production function gives the maximum quantity of output that can be produced for various quantities of inputs.
				C138. Calculates output levels for the given quantity of labour and capital.
	Total Product, Average Product,	LO17. Explain firms' costs and revenue goals-using total, average and marginal, total cost	CLO62. Describes marginal and average product	C139. Defines and rationalizes the shape of an isoquant curve.
				C140. Derives the formulae for the average and marginal product from the total product.

	Marginal Product	(TC), average total cost (ATC), fixed cost (FC), variable cost (VC), average fixed cost (AFC), average variable cost (AVC) and MC		C141. Calculates marginal product and average product from total product.
	Law of Diminishing Marginal Product			C142. Explains the law of diminishing marginal product or the law of variable proportions.
				C143. Explains the law of variable proportions.
	Shapes of TP, AP, and MP curves.	LO17. Explain firms' costs and revenue goals-using total, average and marginal, total cost (TC), average total cost (ATC), fixed cost (FC), variable cost (VC), average fixed cost (AFC), average variable cost (AVC) and MC	CLO64. Illustrates the average and marginal with respect to product	C144. Illustrates the shapes of all the three curves.
	Returns to scale		CLO65. Describes the production function	C145. Explains the constant, increasing, and decreasing returns with increasing scale.
	Costs			C146. States the Cobb-Douglas production function.
			CLO66. Illustrates the average and marginal with respect to cost.	C147. Derives the various formulae of short-run total and average costs.
				C148. Numerically derives all the costs from the total fixed cost and total variable cost.
				C149. Illustrates the shapes of the short-run and long-run cost curves.
4. <b>Unit 3</b> The Theory of The Firm	Defining Features of Perfect Competition	LO20. Explain competitive markets and use diagram to show the effect of large number of firms on price, quantity, choice and profit	CLO67. Describes the perfect competitive market	C150. States the defining features of a perfect competition market.
				C151. Explains what price is taking behaviour.

Under Perfect Competition	Revenue	LO18. Explain total revenue (TR), average revenue (AR) and marginal revenue (MR)	CL068. Illustrates the average and marginal with respect to revenue	C152. Defines total revenue, marginal revenue and average revenue of a firm.
	Profit maximisation	LO19. Evaluate the forms of market to maximize consumers satisfaction and producers' profit	CL069. Evaluates the firm's profit in terms of its total revenue (TR) and its total cost of production	C153. Deconstructs the three conditions required for profit maximisation for a firm in a perfectly competitive market.
	Supply curve of a firm	LO20. Explain competitive markets and use diagram to show the effect of large number of firms on price, quantity, choice and profit	CL070. Describes the levels of output of the firm in short run using supply curve	C154. Defines supply schedule, supply curve, short-run supply, and long run supply.
	Short run Supply Curve of a Firm			C155. Diagrammatically derives the short-run supply curve of a firm when the price is greater than, equal to or less than the minimum AVC.
	Long run Supply Curve of a Firm		CL071. Describes the levels of output of the firm in long-run using supply curve	C156. Diagrammatically derives the long run supply curve of a firm when the price is greater than, equal to or less than the minimum LRAC.
	The Shut Down Point		CL072. Analyses the curve for a firm in both long and short run	C157. Defines the shutdown point for a firm in both the long run and short run.
	The Normal Profit and Break-Even Point	LO20. Explain competitive markets and use diagram to show the effect of large number of firms on price, quantity, choice and profit	CL073. Illustrates the relationship between different types of profits	C158. Defines the relationship between normal profits, supernormal profits, and the break-even point of a firm.
			CL074. Explains the opportunity cost of the firm	C159. Defines the opportunity cost of a firm.

5. <b>Unit 4</b> Market Equilibrium	Determinants of a Firm's Supply Curve	LO9. Explain elasticity of demand and supply	CL075. Explains the determinants of the firm's curve	C160. Explains the two determinants of a firm's supply curve i.e., technological progress, and input prices.
	Market Supply Curve		CL076. Describes the effects on market supply and demand curve	C161. Derives the market supply curve from individual supply curves at a given fixed market price 'p'.
	Price Elasticity of Supply			C162. Rationalizes the shifts in a market demand curve.
				CL077. Evaluates the elasticity of supply curve
	C164. Uses different method to determine price elasticity of the supply curve.			
	5. <b>Unit 4</b> Market Equilibrium		Equilibrium, Excess Demand, Excess Supply	LO13. Explain market equilibrium, draw and interpret demand and supply schedules and curves used to identify disequilibrium prices and shortages
Market Equilibrium: Fixed Number of Firms		C166. Defines excess supply and excess demand.		
		C167. Illustrates equilibrium for a perfectly competitive market with a fixed number of firms.		
			CL079. Evaluates the equilibrium of a perfect competitive market using demand-supply curve	
C169. Describes the theory of wage determination under a perfectly competitive market structure using the demand-supply analysis.				

				C170. Illustrates the impact of a shift in demand and supply curve.
	Market Equilibrium: Free Entry and Exit	LO13. Explain market equilibrium, draw and interpret demand and supply schedules and curves used to identify disequilibrium prices and shortages (demand more than the supply) and excesses (supply more than the demand)	CLO80. Evaluates the effects on market price due to free entry and exit of firms	C171. Determines the effect on market price due to the free entry and exit of firms.
				C172. Numerically determines the effect on market price due to the free entry and exit of firms.
		LO10. Demonstrates inquisitiveness and raise questions related to market equilibrium	CLO81. Describes the impact of changes in market equilibrium	C173. Examines the impact of a shift in demand on equilibrium price and quantity when the firms can freely enter and exit the market.
	Applications	LO14. Demonstrate the role of Government in overcoming the limitations of market system	CLO82. Explains the role of government intervention in the form of price control of market	C174. Explains the role of price ceiling in necessary goods.
				C175. Explains the role of price flooring in the case of agriculture goods.

## CLASS 12 CONTENT DOMAIN SPECIFIC LEARNING OUTCOMES AND INDICATORS

**Table VII: Content domain specific learning outcomes and indicators – Class:12**

Unit and chapter	Key concept	NCERT Learning Outcomes (LOs)	Content domain specific Learning Outcomes (CLOs)	Indicators
<b>Textbook: Introductory Macroeconomics</b>				
1. Introduction	Introduction to Macroeconomics	LO36. Explain the nature, scope and methodology of economics and find out the difference between micro and macroeconomics	CLO1. Explains macroeconomics and microeconomics	C1. States the questions asked in Macroeconomics.
				C2. Identifies the aggregate variables in Macroeconomics.
				C3. Defines how the aggregate variables in an economy move together.
				C4. Differentiates Microeconomic approach from Macroeconomic approach.
			CLO2. Describes the importance of microeconomics	C5. Explains the evolution of the modern economics. (And the contribution of Adam Smith in the field of economics).
				C6. States the characteristics of Macroeconomics.
	Emergence of Macroeconomics	LO36. Explain the nature, scope and methodology of economics and find out the difference between micro and macroeconomics	CLO3. Explains the evolution of Macroeconomics	C7. Understands the evolution of Macroeconomics. (And the contribution of John Maynard Keynes).
				C8. Describes the Great Depression of 1929.
	Importance of Macroeconomics	LO36. Explain the nature, scope and methodology of economics and find out the	CLO4. Explains the characteristics of macroeconomics	C9. Describes the important features of a capitalist economy.

		difference between micro and macroeconomics		C10.Describes the four major sectors in an economy according to the macroeconomic point of view.
2. National Income Accounting	Some Basic Concepts of Macroeconomics	LO19. Communicate economic information and ideas related to National income, Human development index and sustainable development	CLO5. Analyses the flow of production in economics	C11.Describes the basic concepts of macroeconomics.
				C12.Differentiates between different kinds of goods. (Final, consumption, capital, consumer durables, non-durables, intermediate)
			CLO6. Explains the measurement of capital stock in an economy using net investment.	C13.Articulates the concept of double counting in the calculation of national income and goods production.
				C14.Differentiates between gross and net investment.
				C15.Explains depreciation.
				C16.Rationalizes the trade-off between consumption goods and capital goods.
	Circular Flow of Income and Methods of Calculating National Income	LO21. Discuss the three methods of measuring the National Income	CLO7. Explains simple economy and methods to calculate National Income.	C17.Exemplifies a simple economy with two sectors diagrammatically or verbally.
				C18.Connects the four sectors with their remunerations.
	The Product or Value-added Method and GDP	LO20. Explain gross domestic product (GDP) can be used to measure economic growth	CLO8. Explains Production, Intermediate Goods and Value Added.	C19.Explains the product method using an example of a simple economy.
				C20.Differentiates between net and gross value added.



3. Money and Banking			CLO9. Analyses basic national income aggregates.	C21. Defines inventory.
				C22. Differentiates between National Disposable Income and Private Income
				C23. Calculates basic national income aggregates – GDP, NNP.
				C24. Differentiates between Real and Nominal GDP.
		L022. Describe the limitations of using GDP as an indicator of development	CLO10. Explains importance of calculating GDP	C25. Evaluates GDP of a country as an index of the welfare.
	Functions of Money	L01. Inquires money, types of money and functions of banks	CLO11. Explains various function of money	C26. Identifies the need for money functions of money
			CLO12. Identifies and explain different roles of money	C27. Numerically demonstrate the role of money as a store of value.
				C28. Identifies the convertibility of money.
				C29. Explains the uses of digital transactions.
	Demand for Money	L02. Describe the forms, function and characteristics of money	CLO13. Evaluates the demand of money and different factors affecting it	C30. Describes demand for money and supply of money.
				C31. Rationalizes the relationship between interest rates and the demand for money.
	Supply of Money	L03. Discuss the role and importance of central banks and commercial banks for	CLO14. Describes the supply of money	C32. Explains how money comprises cash and bank deposits.

		government, consumer and producers	CLO15. Describes the currency held by the public and net demand deposits held by commercial banks.	C33.States the role of central bank of India and the roles of a central bank in a country in creating money.
				C34.Differentiates between the role of the central bank and the commercial banks in determining the supply of money.
	Money Creation by Banking System	LO3. Discuss the role and importance of central banks and commercial banks for government, consumer and producers	CLO16. Outlines the process of money creation by the commercial banking system.	C35.Defines the process of credit creation by the banking system.
				C36.Defines assets and liabilities of a commercial bank.
				C37.Creates a balance sheet of a fictional bank.
	Limits to Credit Creation and Money Multiplier	LO3. Discuss the role and importance of central banks and commercial banks for government, consumer and producers	CLO17. Explains the role of central bank and its functions such as Reserve Bank of India.	C38.Justifies the role of CRR/RBI in limiting the process of credit creation.
	Policy Tools to Control Money Supply	LO3. Discuss the role and importance of central banks and commercial banks for government, consumer and producers	CLO18. Differentiates repo rate, reverse repo rate and open market operations.	C39.Differentiates between repo and reverse repo rate.
	Demonetisation	LO14. Emphasize economic decisions by highlighting the role of government	CLO19. Explains and evaluates the role of demonetisation in India	C40.Critically analyses the process of demonetization undertaken by the Indian government in 2016.

4. Determination of Income and Employment	Consumption and Income	LO10. Explain and suggest measures for the determination of income and employment	CLO20. Understands different attributes of income determination	C41. Differentiates between ex-post and ex-ante in economics.
			CLO21. Explains the different terms related to consumption	C42. Defines and creates a consumption function.
				C43. Defines and formulates Average Propensity to Consume (APC) and Marginal propensity to consume (MPC).
				C44. Defines and formulates Average Propensity to Save (APS) and Marginal propensity to save (MPS).
	Investment	LO11. Discuss aggregate demand and aggregate supply, propensity to consume and propensity to save (average and marginal) and measures to correct excess and deficient demand	CLO22. Explains investment and its types	C45. Defines investment.
				C46. Defines autonomous investment.
	A two-Sector Model	LO11. Discuss aggregate demand and aggregate supply, propensity to consume and propensity to save (average and marginal) and measures to correct excess and deficient demand	CLO23. Explains the method of determination of income in two model system	C47. Explains the determinants of income in a two-sector model
			CLO24. Explains the method of determination of income in short run	C48. Formulates the aggregate demand and disposable income of an economy.
				C49. Explains the determination of equilibrium income in the short run

	Macroeconomic Equilibrium with Price Level Fixed	LO10. Explain and suggest measures for the determination of income and employment	CLO25. Represents the macroeconomic equilibrium through different methods	C50. Establishes macroeconomic equilibrium with price level fixed through the graphical and algebraic methods.
	Effect of an Autonomous Change in Aggregate Demand on Income and Output	LO11. Discuss aggregate demand and aggregate supply, propensity to consume and propensity to save (average and marginal) and measures to correct excess and deficient demand	CLO26. Evaluates the effects of an autonomous change in aggregate demand on income and output	C51. Describes the effects of autonomous change in aggregate demand on income and output.
	The Multiplier Mechanism		CLO27. Describes multiplier mechanism	C52. Demonstrates Equilibrium Output and Aggregate Demand in the Fixed Price Model
	The paradox of Thrift		CLO28. Describes paradox thrift.	C53. Deconstructs the multiplier mechanism in the final goods market.
	Excess and Deficient Demand		CLO29. Differentiates between excess and deficient demand.	C54. Explains paradox thrift.
				C55. Differentiates between excess and deficient demand.
5. Government Budget and the Economy	Government Budget	LO15. Explain budget and reason out the main areas of government spending and its impact on those areas	CLO30. Describes the meaning and components of government budget.	C56. Defines mixed economy.
				C57. Explains different components of government budget.
				C58. Explains revenue budget and capital budget.
	Objectives of Government Budget	LO16. Discuss the role of government in an economy through budgetary process and different types of taxes	CLO31. Explains the different objectives of government budget.	C59. Explains the Allocation Function of Government Budget.
				C60. Defines public goods and private goods.

				C61.Describes the role of free riders.
				C62.Explains public provision and public production.
				C63. Defines the redistribution and stabilisation functions of government budget.
	Classification of Receipts	LO17. Discuss fiscal policy measures with respect to change in tax and spending, that cause balance or imbalance budget and calculate the size of a budget deficit or surplus	CL032. Classifies receipts.	C64. Defines revenue receipts and capital receipts.
	Classification of Expenditure		CL033. Explains expenditure.	C65. Classifies revenue expenditure into planned and non-planned
				C66. Explains capital expenditure.
	Balanced, Surplus and Deficit Budget	LO17. Discuss fiscal policy measures with respect to change in tax and spending, that cause balance or imbalance budget and calculate the size of a budget deficit or surplus	CL034. Summarises the types of budgets.	C67. Differentiates between deficit, surplus and balanced budgets.
	Measures of Government Deficit	LO17. Discuss fiscal policy measures with respect to change in tax and spending, that cause balance or imbalance budget and calculate the size of a budget deficit or surplus	CL035. Explains the measures of government deficit - revenue deficit, fiscal deficit, primary deficit and their meaning.	C68. Defines and formulate the revenue deficit and fiscal deficit of an economy.
				C69. Explains the functioning of fiscal policy.
				C70. Explains the Goods and Services Tax.
6. Open Economy Macroeconomics	Open Economy	LO18. Discuss monetary policy measures with respect to		C71. Explains the role of open economy and its linkages.

		change in interest rates, money supply and foreign exchange rates	CLO36. Explains the chief components of an open economy.	C72. Explains the role of output, finance and labour links with open economy.
				C73. Explains how foreign trade influences Indian aggregate demand in two ways – leakage and injection.
				C74. Explains the role of international monetary system
	The Balance of Payments		CLO37. Describes payments and transactions.	C75. Explains the operations of balance of payments.
	Current Account and Capital Account.	LO18. Discuss monetary policy measures with respect to change in interest rates, money supply and foreign exchange rates		C76. Explains the different components of current account and capital account.
	Balance of Payments – Surplus and Deficit	LO17. Discuss fiscal policy measures with respect to change in tax and spending, that cause balance or imbalance budget and calculate the size of a budget deficit or surplus		C77. Explains the meaning of balance of payments equilibrium mean for a country.
				C78. Evaluates autonomous and accommodating transactions.
				C79. Defines errors and omissions in transactions.
		C80. Analyses the values of overall balance and reserve charge for balance of payments deficit, balanced and surplus.		

	The Foreign Exchange Market and Foreign Exchange Rate.	LO34. Analyse the demand for and supply of a currency in the foreign exchange market	CLO38. Describes the foreign exchange market.	C81. Explains foreign exchange market as a market in which national currencies are traded for one another.
				C82. Describes the different methods to determine exchange rate.
				C83. Defines floating and flexible exchange rates.
				C84. Explains speculation.
		Fixed Exchange Rates	LO33. Differentiate between floating and the fixed system	CLO39. Describes the fixed exchange market.
Textbook: Indian Economic Development				
Unit I: Development Policies and Experience  1. Indian Economy on the Eve of Independence	Economic Development Under Colonial Rule	LO5. Discuss critical issues of the Indian economy since independence	CLO40. Describes the effects on economy in India during British rule.	C87. Identifies the reasons for India's economic success pre-colonial rule.
	Agricultural Sector		CLO41. Explains the agricultural economy in India during British rule.	C88. Compares and contrasts the agricultural sector pre and during British rule.
				C89. Analyses the impact of the commercialization of agriculture on the farmers.
				C90. Summarises the impact of the Zamindari System on the Indian Farmers.

	Industrial Sector	LO5. Discuss critical issues of the Indian economy since independence	CLO42. Explains the industrial economy in India during British rule.	C91. Evaluates the British rule's role in India's industrial development.
				C92. Highlights the impact of industrialisation on India's handicraft sector.
				C93. States the role of capital good industry in the industrialisation of a country.
	Foreign Trade	LO5. Discuss critical issues of the Indian economy since independence	CLO43. Analyses the foreign trade of India during British rule.	C94. Summarises British strategies to maintain a monopoly over India's foreign trade.
				C95. Infers the role of the Suez Canal in strengthening British monopoly over India's foreign trade.
	Demographic Condition	LO5. Discuss critical issues of the Indian economy since independence	CLO44. Explains the effects of economy during British rule on demographic conditions.	C96. Creates a profile of indicators that reflected India's demographic condition during the second transition.
				C97. Compares the relationship between India's high mortality rate and low life expectancy.
	Occupational Structure		CLO45. Describes India's occupational structure across regions/states.	C98. Visually represents India's occupational structure across regions/states.



<b>Unit I: Development Policies and Experience</b>  2. Indian Economy 1950-1990	Infrastructure		CLO46. Explains the effects of economy during British rule on infrastructure conditions	C99. Evaluates the British rule's initiatives to develop India's infrastructure.
				C100. Recognises the impact that the development of railways had in changing India's economy.
				C101. Evaluates the overall impact of British rule on India's economy.
	Planning Commission	LO5. Discuss critical issues of the Indian economy since independence	CLO47. Explains post-independence planning system	C102. Justifies the setting up of the Planning Commission post-independence.
			CLO48. Explains components of economic systems	C103. Defines a plan in an economic system.
				C104. Recognises the importance of having goals.
	The Goals Of 5 Year Plan	LO6. Evaluate five-year plan and the role of NITI Ayog in planning, allocation of funds to various sectors like agriculture, industry, services for the specific cases such as removal of poverty and unemployment	CLO49. Explains the goals of 5-year plan – Growth, Modernisation, Self-reliance, Equity	C105. Argues for the need for adoption of technology to ensure a nation's prosperity.
				C106. Outlines the changes in the structural composition in India's economy before the onset of globalisation.
				C107. Analyses the importance that 'equity' plays in a nation.

	Agriculture	LO6. Evaluate five-year plan and the role of NITI Ayog in planning, allocation of funds to various sectors like agriculture, industry, services for the specific cases such as removal of poverty and unemployment	CL050. Explains the factors that boosted India's agricultural sector.	C108. Justifies the need for land reforms in independent India.
				C109. Evaluates the success of the land ceiling policy, use of HYV seeds and subsidies in the agricultural sector in India.
				C110. Summarises the benefits of Green Revolution in India.
	Industry and Trade	LO6. Evaluate five-year plan and the role of NITI Ayog in planning, allocation of funds to various sectors like agriculture, industry, services for the specific cases such as removal of poverty and unemployment	CL051. Describes and evaluates the industrial economy post-independence.	C111. Justifies the emphasis put on the development of the industrial sector post-independence.
				C112. Evaluates the need for governmental control on vital services in the Indian Economy
				C113. Articulates the role that small scale industries play in the economy and justifies the reason for their support by the government.
	Trade Policy	LO6. Evaluate five-year plan and the role of NITI Ayog in planning, allocation of funds to various sectors like agriculture, industry, services for the	CL052. Analyses the advancement in trade policies in India post-independence.	C114. Differentiates between the application of tariffs and quotas on import.
				C115. Critiques some the economic policies of India during the first 7 plans.

		specific cases such as removal of poverty and unemployment		C116. Justifies the need for competition from import sources in any sector for the good of the public.
<b>Unit II: Economic Reforms Since 1991</b>  3. Liberalisation, Privatisation and Globalisation: An Appraisal	Background of Foreign Policies	LO30. Discuss the need and main features of liberalization, globalization and privatization	CLO53. Enlists the advancement in the economic policies and associated organisations.	C117. Identifies all the activities that led India to the doors of IMF and World Bank for loans.
				C118. Compares and contrasts the main economic reforms proposed in the NEP.
	Liberalisation	LO29. Discuss the need and main features of liberalization, globalization and privatization		C119. Summarises the background of the reform policies introduced in India.
			CLO54. Explains the steps and impact of liberalisation.	C120. Describes the reforms in financial sector through liberalisation.
				C121. Evaluates the tax reforms through liberalisation.
				C122. Evaluates the foreign exchange reforms through liberalisation.
	Liberalisation	LO35. Define and explain a few important terms and concepts associated with balance of payments in Indian context	CLO54. Explains the steps and impact of liberalisation.	C123. Assesses all the different ways in which India aimed at becoming a competitive player in the international market.
		LO29. Discuss the need and main features of liberalization, globalization and privatization		CLO55. Explains the steps taken to privatise government enterprises.
Privatisation		LO29. Discuss the need and main features of liberalization, globalization and privatization		

				C125. Outlines ways in which the Indian Government carried out privatisation in the economy.
	Globalisation	LO29. Discuss the need and main features of liberalization, globalization and privatization	CLO56. Describes the steps and impact of the economic globalisation policy.	C126. Explains globalisation as an economic phenomenon.
		LO31. Discuss the role of multinational companies (MNCs) and the costs and benefits to their host and home countries and the role of government in regulating the economic activities in an economy		C127. Evaluates outsourcing as one of the outcomes of the globalisation process.
		LO29. Discuss the need and main features of liberalization, globalization and privatization		C128. Describes the role of World Trade Centre.
	Indian Economy During Reform: An Assessment	LO29. Discuss the need and main features of liberalization, globalization and privatization	CLO57. Assesses the impact of reformation steps taken in 1991.	C129. Evaluates the impact the economic reforms had on the agricultural sector.
				C130. Evaluates the performance of the Indian economy during the period of reform in industries and trade.
				C131. Evaluates the success of the economic reform policies keeping welfare and social development in mind.

<b>Unit III: Current Challenges Facing the Indian Economy</b>  4. Human Capital Formation in India	Human Capital	LO28. Discuss the state of infrastructure with respect to energy and health	CLO58. Explains the importance of educational infrastructure and human capital development.	C132. Recognises the need for educational infrastructure for any country’s development.
	Sources of Human Capital	LO28. Discuss the state of infrastructure with respect to energy and health		C133. Justifies investment in health infrastructure for the development of the nation.
			CLO59. Describes the concept of Human Capital Formation	C134. Evaluates the efficacy of on-the-job training provided by employers towards human capital development.
				C135. Argues for or against migration of human capital for employment.
			C136. Summarises the different factors that play a role in human capital formation.	
	Human Capital and Economic Growth	LO24. Discuss the strategies adopted for sustainable development in India	CLO60. Understands the links between investment in human capital and economic growth.	C137. Evaluates the relation between growth in human capital formation and economic growth.
				C138. Categorises and justifies the various changes in the world’s knowledge landscape as outlined by the NEP 2020.
C139. Describes why India is known as a ‘Knowledge Economy’.				

	States Of Human Capital Development in India	LO23. Examine alternative indicator of development and use Human Development Index as a case study	CLO61. Explains the need for government spending on education.	C140. Justifies the need for government intervention in the education sector.
	Education Sector in India	LO23. Examine alternative indicator of development and use Human Development Index as a case study	CLO62. Evaluates the state of India's educational attainment.	C141. Evaluates the government's expenditure across the different levels of education (Primary, Secondary, Tertiary).
				C142. Evaluates the educational achievements in India.
	Future Prospects of Education	LO23. Examine alternative indicator of development and use Human Development Index as a case study	CLO63. Enlists and explains the future prospects of Education in India.	C143. Justifies why 'Education For All' is still a distant dream.
				C144. Argues for gender equity in education.
				C145. Infers why the number of unemployed educated people is higher than the number of unemployed uneducated people.
				C146. Emphasizes on need for greater expenditure on higher education.
<b>Unit III: Current Challenges Facing the Indian Economy</b>	Rural Development	LO23. Examine alternative indicator of development and use Human Development Index as a case study	CLO64. Explains rural development and the major issues associated with it	C147. Summarises the importance of investment in rural development and the key areas for rural development.

5. Rural Development			CLO65. Evaluates how crucial the development of rural areas is for country's development	C148. Justifies the importance of opening opportunities for farming and non-farming activities for rural development.
	Credit and Marketing in Rural Areas	LO23. Examine alternative indicator of development and use Human Development Index as a case study	CLO66. Describes the critical role of credit systems in rural development.	C149. Outlines the various factors that led to farmers falling into debt traps in the independence era.
				C150. Points out the changes that NABARD got to the rural credit system.
				C151. Analyses the rural banking system and the micro-credit programmes of India.
	Agricultural Market Systems	LO23. Examine alternative indicator of development and use Human Development Index as a case study	CLO67. Explains the role of government in agricultural marketing	C152. Defines 'Agricultural Marketing.'
				C153. Describes the need for government regulation in the agricultural market.
				C154. Evaluates the efficacy of the different programmes initiated by the government to regulate the agricultural market.
			CLO68. Describes the critical role of marketing systems in rural development.	C155. Infers the benefits from commercialisation of agriculture.

	Diversification into Productive Activity	LO14. Emphasize economic decisions by highlighting the role of government	CLO69. Describes and evaluates the importance of diversification of productive activities to sustain livelihoods.	C156. Identifies various ways in which rural employment can be diversified.
				C157. Appreciates 'Operation Flood' in 1951.
			CLO70. Evaluates the impact of education and technological infrastructure on rural employment	C158. Appraises the various issues faced by the people employed in the fishing industry.
				C159. Predicts the benefits the rural employment sector will get with increased education and technological infrastructure.
	Sustainable Development and Organic Farming	LO24. Discuss the strategies adopted for sustainable development in India	CLO71. Describes the significance of organic farming in sustainable development	C160. Demonstrates the benefits and limitations of organic farming.
				C161. Evaluates the status of the organic farming industry in India and its future.
<b>Unit III: Current Challenges Facing the Indian Economy</b>  6. Employment: Growth,	Workers And Employment	LO12. Discuss wage determination, the influence of demand and supply, relative bargaining strength and government policy, including the fixation of minimum wage; basic concepts relating to employment such as economic	CLO72. Describes the importance of employment in a Nation.	C162. Explains the concept of Gross National Product.
				C163. Visually represents the division of the Indian workforce.
				C164. Defines the terms associated with population and employment.



Informalisation and Other Issues		activity, worker, workforce and unemployment and distinguishes between disguised and seasonal unemployment	CLO73. Evaluates the nature of participation of men and women in various economic activities in various sectors.	C165. Points out the social and cultural norms that lead to gender inequity in employment.
				C166. Infers reasons for differences in the workforce distribution in urban and rural areas.
	Participation of People in Employment	LO12. Discuss wage determination, the influence of demand and supply, relative bargaining strength and government policy, including the fixation of minimum wage; basic concepts relating to employment such as economic activity, worker, workforce and unemployment and distinguishes between disguised and seasonal unemployment	CLO74. Evaluates the distribution of workforce in different sectors	C167. Visually represents the distribution of workforce by industry.
				C168. Assesses the reasons for a higher concentration of workforce in the primary sector.
	Self Employed and Hired Workers	LO13. Describe the role of government with respect to economic growth, full employment/low unemployment, stable prices/low inflation, equilibrium in the balance of	CLO75. Evaluates the proportion of hired and self-work jobs in different sectors	C169. Describes the role of hired and self-employed workers in economy.
			CLO76. Describes the continuous decline in the percentage	C170. Describes reasons for the stagnation of the workforce in the secondary sector.
				C171. Analyses the concept of 'casualisation of workforce'.

	Informalisation of Indian Workforce	payment, redistribution of income	of workforce in the formal sector and increase in informal sector's workforce	C172. Evaluates the support that workers in the formal and the informal sector get in India.
	Unemployment	L012. Discuss wage determination, the influence of demand and supply, relative bargaining strength and government policy, including the fixation of minimum wage; basic concepts relating to employment such as economic activity, worker, workforce and unemployment and distinguishes between disguised and seasonal unemployment	CLO77. Describes the nature of unemployment	C173. Defines unemployment. C174. Interprets the reasons and the issues of 'disguised unemployment and 'seasonal unemployment.'
	Government And Employment Generation	L013. Describe the role of government with respect to economic growth, full employment/low unemployment, stable prices/low inflation, equilibrium in the balance of payment, redistribution of income	CLO78. Evaluates the initiatives taken by the government in generating employment opportunities in various sectors and regions.	C175. Justifies the need for governmental interference in employment generation. C176. Points out the role that government plays in indirect employment of the workforce in the private sector.

<b>Unit III: Current Challenges Facing the Indian Economy</b>  7. Environment and Sustainable Development	Environment - Development and Function	LO19. Communicate economic information and ideas related to National income, Human development index and sustainable development	CLO79. Understands the concept of environment.	C177. Appreciates the importance of the environment in economic development.
				C178. Explains the functions of the environment.
				C179. Infers the consequences of the environment being pushed beyond its carrying capacity.
	Environmental Degradation and Resource Depletion	LO19. Communicate economic information and ideas related to National income, Human development index and sustainable development	CLO80. Analyses the causes and effects of 'environmental degradation' and 'resource depletion'.	C180. Evaluates the economic development's impact on the environment.
				C181. Explains how global warming a liability to the government in economic terms.
	State of India's Environment	LO25. Predict and evaluate the challenges facing Indian economy	CLO81. Describes the nature of environmental challenges facing India.	C182. Appraises India's environmental factors that support its economic growth.
				C183. Highlights the major environmental concerns India has.
				C184. Highlights the causes for land degradation in India.
	Sustainable Development	LO19. Communicate economic information and ideas related to National income, Human development index and sustainable development	CLO82. Relates environmental issues to the larger context of sustainable development.	C185. Highlights the importance of sustainable development as the need of the hour.

	Strategies for Sustainable Development			<p>C186. Evaluates the efficacy of using various non-conventional sources of energy for sustainable development.</p> <p>C187. Synthesises how rural and urban areas can be made energy efficient.</p> <p>C188. Evaluates the challenges with wind energy.</p> <p>C189. Comments on India's success in harnessing solar energy.</p> <p>C190. Marks out areas that could use mini-hydel energy.</p> <p>C191. Produces examples of how the agriculture sector can benefit from bio-composting and bio-pest control.</p>
		LO24. Discuss the strategies adopted for sustainable development in India	CLO83. Summarises the different strategies for sustainable development	
<b>Unit IV: Development Experiences of India: A Comparison with Neighbours</b>  8. Comparative Development Experiences of India and its Neighbours	Globalisation	LO8. Investigate the relationship between India and its neighbours	CLO84. Describes the importance of globalisation.	C192. Highlights the effects of globalization on economic development.
	Developmental Path	LO8. Investigate the relationship between India and its neighbours	CLO85. Explains the similarities in the developmental strategies of India, Pakistan and China.	<p>C193. Analyses China's road to becoming an industrial superpower due to its policies in the past.</p> <p>C194. Relates China's industrial policies with Indian policies.</p> <p>C195. Distinguishes between India and Pakistan's nationalisation policy to boost economic growth.</p>

	Demographic Indicators	LO30. Analyse reasons for change and consequences of trade with other countries	CLO86. Analyses comparative trends in various economic and human development indicators of India and its neighbours, China and Pakistan.	C196. Draws parallels between the demographic indicators for India, China and Pakistan.
	Gross Domestic Product and Sectors	LO9. Explain the macroeconomic events in India and neighbouring countries and visualize the economic future of India	CLO87. Describes the role of Gross Value Added (GVA) for determination of development.	C197. Comments on the sectorial distribution of population in India, Pakistan and China. C198. Defines GVA. C199. Analyses the reasons for growth in China's manufacturing sector. C200. Makes suggestions for ways to improve Pakistan's GVA.
	Indicators of Human Development and their appraisal.	LO23. Examine alternative indicator of development and use Human Development Index as a case study	CLO88. Assesses the strategies that these countries have adopted to reach their present state of development	C201. Makes a comparative analysis of India, China and Pakistan's Human Development Indicators. C202. Comments on how a higher rate of mortality has affected India as opposed to China. C203. Evaluates the relevance and importance of 'liberty indicator' in these countries. C204. Justifies the importance of countries studying their neighbours' developmental strategies.

				<p>C205. Appraises reforms made in China that India could emulate.</p> <p>C206. Points out concerns in Pakistan's economic policies and structures.</p>
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## 8. SAMPLE PEDAGOGICAL PROCESSES AND ASSESSMENT STRATEGIES

“The pedagogical practices should be learner centric. It is expected of a teacher to ensure an atmosphere for students to feel free to ask questions. They would promote active learning among students with a focus on reflections, connecting with the world around them, creating and constructing knowledge. The role of a teacher should be that of a facilitator who would encourage collaborative learning and development of multiple skills through the generous use of resources via diverse approaches for transacting the curriculum.”

[CBSE Curriculum for classes 11-12]

NCERT higher secondary stage learning outcomes document provides a common set of pedagogical processes for each subject. Keeping these as guidelines, specific pedagogical processes and assessment strategies for a topic from one chapter each from classes 11 and 12 have been developed as suggestions and are shared in this section. These instances of pedagogical process and assessment strategies should enable teachers to derive principles for making the alignment between learning outcomes, pedagogical practices and assessment in their classrooms and to use these for creating their lesson plans. The key principles considered while designing the pedagogical processes and assessment strategies are the following:

1. Keeping learner at the centre
  - Since new knowledge is built over existing knowledge, both pedagogy and assessment should focus on students’ pre-requisite knowledge, skills, attitudes, and beliefs that they bring in classroom setting.
  - Constructivist approaches to learning with the student being at the centre of the learning process as an active constructor of knowledge must be emphasized.
  - Since students effectively learn by doing, classroom processes should involve activities, analysis and discussions. Systematic experimentation as a tool to discover/verify theoretical principles must be included.
2. Focusing on learning outcomes
  - Learning outcomes indicate what a student will be able to do at the end of an instruction unit by precisely breaking down broad goals of Economics education (apply reasoning to develop conceptual understanding, develop process skills and experimental, observational, manipulative, decision-making and investigatory skills, etc.) to more measurable and observable behaviour for each class.

- Students learn better when the method of teaching, learning activities and assessment strategies are all aligned well to the learning outcomes. Pedagogical processes and assessment strategies should be aligned to both content domains and cognitive skills as mentioned in this document earlier.
3. Making effective use of assessments
    - Assessment should be viewed as an integral part of pedagogy and it should focus on giving timely individualized feedback to students. Quality formative assessment should be designed as it helps to modulate students' understanding of their own learning and helps teachers adapt their pedagogy based on students' actual learning.
    - Multiple modes of assessment including portfolios, project work, presentations, written and oral assignments should be used to reflect individual capacities of a student.
  4. Creating a social and inclusive learning environment
    - Cooperative and peer-supported teaching learning activities should be used to empower students to take charge of their own learning.
    - Peer assessment involving students assessing work of their peers against set assessment criteria should be used.

Specific pedagogical processes should be used in the classroom that would help those students who may face learning difficulties including language, visual-spatial, or mixed processing problems

#### SUGGESTED PEDAGOGICAL PROCESSES AND ASSESSMENT STRATEGIES FOR CLASS 11

**Content Domain:** Unit 4

**Chapter 5:** Market Equilibrium

**Table VIII: Suggested Pedagogical Processes and Assessment Strategies – Class:11**

Learning outcomes	Indicators	Pedagogical Processes	Assessment Strategies
LO13. Explain market equilibrium, draw and interpret demand and supply schedules and curves used to identify disequilibrium prices and shortages (demand more than the	C171. Determines the effect on market price due to the free entry and exit of firms. C172. Numerically determines the effect on market price due to the free entry and exit of firms.	<ul style="list-style-type: none"> <li>• Use examples so that students understand how revenue – cost equilibria change in a free market. This can be done by:               <ol style="list-style-type: none"> <li>1. Using hypothetical examples in the textbooks.</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>• Check student understanding of TR, AR and MR by using numbers which they can insert in the models to predict:</li> </ul>



supply) and excesses (supply more than the demand)  LO10. Demonstrates inquisitiveness and raise questions related to market equilibrium	C173. Examines the impact of a shift in demand on equilibrium price and quantity when the firms can freely enter and exit the market.	<p>2. Provide students recent simplified revenue data of a company and ask them to calculate the total revenue (TR), average revenue (AR) and marginal revenue (MR) of the company.</p> <p>3. Using real examples of free market situations</p> <ul style="list-style-type: none"> <li>• Get students to come up with their own versions of free market.</li> <li>• Create a hypothetical market in class with rules so that it results in a true free market. Divide class into two-three group of shopkeepers and a group of costumers. Shops should sell same product/service but use different service strategies and let them observe the customers behaviour.</li> <li>• Once the free market runs, change some rules so that it can become a non-ideal free market, which may even lead to monopoly.</li> <li>• You may go from monopolistic competition to monopoly as well.</li> </ul>	<p>1. What will be the TR, AR and MR in a free market?</p> <p>2. How quickly will there be no more profit for the company if the free market has 2 vs. 3 competitors?</p> <p>3. What are the other factors that a monopoly relies on to maintain status quo?</p> <ul style="list-style-type: none"> <li>• Assess student understanding of the impact of monopolistic, monopoly and oligopoly market on consumers, companies (established and newcomers).</li> <li>• All of the above can be done by using the situation described in the pedagogical processes and having a discussion on how the experiences of each group.</li> </ul>
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## SUGGESTED PEDAGOGICAL PROCESSES AND ASSESSMENT STRATEGIES FOR CLASS 12

**Content Domain:** Unit 1**Chapter 1:** National Income and Related Aggregates**Table IX: Suggested Pedagogical Processes and Assessment Strategies – Class:12**

Learning outcomes	Indicators	Pedagogical Processes	Assessment Strategies
<p>L02. Describe the forms, function and characteristics of money.</p> <p>L03. Discuss the role and importance of central banks and commercial banks for government, consumer and producers.</p>	<p>C30. Describes demand for money and supply of money.</p> <p>C31. Rationalizes the relationship between interest rates and the demand for money.</p> <p>C32. Explains how money comprises cash and bank deposits.</p> <p>C33. States the role of central bank of India and the roles of a central bank in a country in creating money.</p> <p>C34. Differentiates between the role of the central bank and the commercial banks in determining the supply of money.</p>	<ul style="list-style-type: none"> <li>Take students to a coin museum visit and instruct them to observe and later write about different forms of money in history and how some forms have worked better and were more useful than others based on their durability, portability, divisibility, uniformity, limited supply, and acceptability.</li> <li>Create a discussion on what situations will lead to increasing purchasing power or the demand for money. e.g. increase in income, low interest rates, etc.</li> <li>Create a mock money lending and borrowing system in class so that students can understand that a bank or money lender is capable of 'creating money'.</li> <li>Increase the complexity of this situation by having competing lenders.</li> </ul>	<ul style="list-style-type: none"> <li>Assess student understanding that a bank (or lender) can technically keep creating money as long as there are deposits being made. This can be achieved through roleplay with certain rules:               <ol style="list-style-type: none"> <li>Assess when students stop giving loans and their rationale for the same.</li> <li>Assess when students stop borrowing money and their rationale for the same.</li> </ol> </li> </ul>

		<ul style="list-style-type: none"> <li>• Rules can be made to change the purchasing power that the borrowers have with them.</li> <li>• All of this can also be done through computer simulations if such a service is available.</li> </ul>	
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## 9. TEST PAPER DESIGN

### CLASS 12

**Table X: Test Paper Design and chapter-wise mark distribution – Class:12**

Content domain	Marks distribution
Unit 1. National Income and Related Aggregates	10–14
Unit 2. Money and Banking	4–8
Unit 3. Determination of Income and Employment	8–12
Unit 4. Government Budget and the Economy	4–8
Unit 5. Balance of Payments	4–8
Unit 6. Development Experience (1947-90) and Economic Reforms since 1991	10–14
Unit 7. Current Challenges facing Indian Economy	20–24
Unit 8. Development Experience of India – A Comparison with Neighbours	4–8
<b>Total</b>	80

**Table XI: Test Paper Design and question-type mark distribution – Class:12**

Item types	Item category	Number of questions	Marks distribution
Select response question	Multiple choice question	10–14	10–14

Free response question	One word/sentence based on two cases	06-10	06-10
	Short answer type question	02-06	06-18
	Long answer type question – Type I	04-08	16-32
	Long answer type question – Type II	02-06	12-36

**Table XII: Test Paper Design and cognitive domain-wise mark distribution – Class:12**

<b>Cognitive domain</b>	<b>Marks distribution</b>
Remember and Understand	42-46
Apply	16-20
Analyse, Evaluate and Create	16-20
<b>Total</b>	<b>80</b>

#### **Other details of the test paper**

- **Maximum marks: 80**
- **Duration of the test (writing time): 3 hours**
- **Time given for reading the test paper: 15 minutes**

## 10. ASSESSMENT OF PRACTICAL/PROJECT WORK

The economics courses also contain many projects and activities. These will provide opportunities for the learners to explore various economic issues both from their day-to-day life and also from issues, which are broader and invisible in nature. The academic skills that they learn in these courses would help to develop the projects and activities. The objectives of the project work are to enable learners to:

- L01. Probe deeper into theoretical concepts learnt in classes XI and XII
- L02. Analyse and evaluate real world economic scenarios using theoretical constructs and arguments
- L03. Demonstrate the learning of economic theory
- L04. Follow up aspects of economics in which learners have interest
- L05. Develop the communication skills to argue logically

## DESIGN OF THE PROJECT/PRACTICAL BASED ACTIVITIES

Students are expected to conduct experiments, do project-based activities, etc throughout the course of 2 years.

**Table XIII. Distribution of marks for the projects/ppt/practical**

Activity	Distribution of marks
Relevance of the topic	3
Knowledge Content/Research Work	6
Presentation Technique	3
Viva-voce	8
<b>Total</b>	<b>20</b>

Students may work upon the project with following expected checklist:

- Introduction of topic/title
- Identifying the causes, consequences and/or remedies
- Various stakeholders and effect on each of them
- Advantages and disadvantages of situations or issues identified
- Short-term and long-term implications of economic strategies suggested in the course of research
- Validity, reliability, appropriateness and relevance of data used for research work and for presentation in the project file
- Presentation and writing that is succinct and coherent in project file
- Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

#### SUGGESTED PROJECTS/ACTIVITIES/PRACTICAL – CLASS 11

Few suggestive topics for projects:

1. Effect on PPC due to various government policies
2. Invisible Hand (Adam Smith)
3. Opportunity Cost as an Economic Tool (taking real life situations)
4. Effect of Price Change on a Substitute Good (taking prices from real life visiting local market)
5. Effect on equilibrium Prices in Local Market (taking real life situation or recent news)
6. Effect of Price Change on a Complementary Good (taking prices from real life visiting local market)
7. Solar Energy, a Cost-Effective Comparison with Conventional Energy Sources
8. Bumper Production- Boon or Bane for the Farmer
9. Any other newspaper article and its evaluation on basis of economic principles
10. Any other topic

#### SUGGESTED PROJECTS/ACTIVITIES/PRACTICAL – CLASS 12

Few suggestive topics for projects:

1. Micro and Small-Scale Industries
2. Food Supply Channel in India
3. Contemporary Employment situation in India
4. Disinvestment policy of the government
5. Goods and Services Tax Act and its Impact on GDP
6. Health Expenditure (of any state)
7. Human Development Index
8. Inclusive Growth Strategy
9. Self-help group
10. Trends in Credit availability in India
11. Monetary policy committee and its functions
12. Role of RBI in Control of Credit
13. Government Budget & its Components
14. Trends in budgetary condition of India
15. Exchange Rate determination – Methods and Techniques
16. Currency War – reasons and repercussions
17. Livestock – Backbone of Rural India
18. Alternate fuel – types and importance
19. Sarwa Siksha Abhiyan – Cost Ratio Benefits
20. Golden Quadrilateral- Cost ratio benefit
21. Minimum Support Prices
22. Relation between Stock Price Index and Economic Health of Nation
23. Waste Management in India – Need of the hour
24. Minimum Wage Rate – approach and Application
25. Digital India- Step towards the future
26. Rainwater Harvesting – a solution to water crises
27. Vertical Farming – an alternate way
28. Silk Route- Revival of the past



- 29. Make in India – The way ahead
- 30. Bumper Production- Boon or Bane for the farmer
- 31. Rise of Concrete Jungle- Trend Analysis
- 32. Organic Farming – Back to the Nature
- 33. Any other newspaper article and its evaluation on basis of economic principles

## 11. SAMPLE ASSESSMENT ITEMS WITH MARKING SCHEMES

### 1. Multiple Choice Question (MCQ)

<b>Content Domain (Chapter name)</b>	Chapter 3: Organisation of Data	
<b>Content Domain Learning outcome</b>	CLO12. Describes the meaning and types of variables	
<b>Indicator</b>	C32. Distinguishes a given set of variables into Continuous and Discrete.	
<b>Cognitive level</b>	Remembering	
<b>Thinking Process</b>	Recall	
<b>Difficulty level</b>	Easy	
<b>Marks</b>	1 mark	
<b>Time</b>	1-2 minutes	
<b>Item Stem</b>	Identify the two types of variables.	
<b>Correct answer</b>	Continuous and Discrete	<b>Reason:</b> Continuous and Discrete are the two types of variables.
<b>Distractor 1</b>	Discrete and Indiscrete	<b>Explanation:</b> Students may have misconception of discrete and indiscrete are the types of variables since they are opposite words.
<b>Distractor 2</b>	Continuous and Discontinuous	<b>Explanation:</b> Students may have misconception of continuous and discontinuous are the types of variables since they are opposite words
<b>Distractor 3</b>	Indiscrete and Discontinuous	<b>Explanation:</b> Explanation: Students may have misconception of discontinuous and indiscrete are the types of variables

## 2. Constructed Response Questions

<b>Content domain (Chapter name)</b>	Chapter 4: Presentation of Data
<b>Content Domain Learning outcome</b>	CL019. Presents the data in textual way
<b>Indicator</b>	C43. Explains the drawbacks of textual presentation of data.
<b>Cognitive level</b>	Analysing
<b>Thinking Process</b>	Inferring
<b>Difficulty level</b>	Medium
<b>Marks</b>	3 marks
<b>Time</b>	4-5 minutes
<b>Item stem</b>	<p>Read the paragraph and answer the questions.</p> <p><i>Out of about 98 million, total intra-state and inter-state migrants in the country during last decade, 61 million have moved to rural areas and 36 million to urban areas. Migration stream out of rural areas (73 million) to another rural areas was quite high (53 million) in comparison to from rural to urban areas (20 million). About 6 million migrants went to rural areas from urban areas. On the basis of net migrants by last residence during the past decade, i.e., the difference between in – migration and out – migration, in each state, Maharashtra stands at the top of the list with 2.3 million net migrants, followed by Delhi (1.7 million), Gujarat (0.68 million) and Haryana (0.67 million) as per census. Uttar Pradesh (-2.6 million) and Bihar (-1.7 million) were the two states with largest number of net migrants migrating out of the state. There are various reasons for migration as per information collected in Census 2001 for migration by last residence. Most of the female migrants have cited 'Marriage' as the reason for migration, especially when the migration is within the state. For males, the major reasons for migration are 'work/employment' and 'education'.</i></p> <p>Source: <a href="https://censusindia.gov.in/census_and_you/migrations.aspx">https://censusindia.gov.in/census_and_you/migrations.aspx</a></p>

		A. A government body must take certain key employment-related decisions based on the data given. Is this form of presentation best suited for decision making? Why/Why not? B. How is such data relevant for the study of economics?	
Marking Scheme			
Part	Mark	Answer	Further Information
A	1		States that textual presentation is not ideal for decision making
A	1		Provides a relevant reason
B	1		Provides examples of economic policies that may be based on these data.

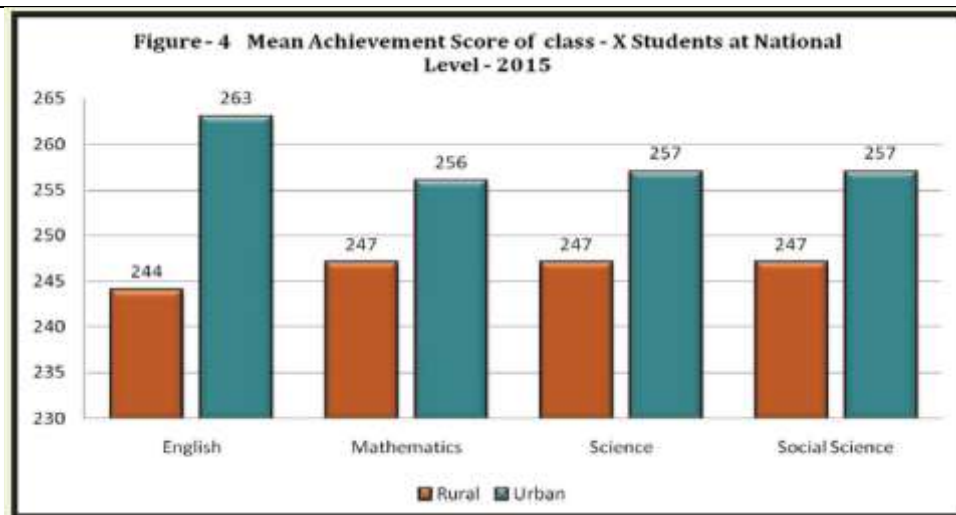
### 3. Constructed Response Questions

Content domain (Chapter name)	Chapter 4: Presentation of Data		
Content Domain Learning outcome	CLO20. Presents the data using tables		
Indicator	C45. Demonstrates their understanding of parts of a table by tabulating a given set of data.		
Cognitive level	Creating		
Thinking Process	Construct		
Difficulty level	Hard		
Marks	5 marks		
Time	5-7 minutes		
Item stem	<i>As per the census of India 2001, in the previous decade 14,446,224 people migrated for work/employment reasons; 1,136,372 for business purposes; 2,915,189 for education reasons; and 43,100,911 due to marriage. The number of males migrating was significantly higher than females, with 12,373,333 males and only 2,072,891 females. Conversely, a much higher number of females migrated due to marriage (42,421,059) as compared to males (679,852). The difference between number of males and females migrating for business purposes was smaller, with 1,136,372 males 950,245 females. However, only 876,514 migrated for education reasons, while 2,038,675 males migrated for the same reason.</i> Source: <a href="https://censusindia.gov.in/census_and_you/migrations.aspx">https://censusindia.gov.in/census_and_you/migrations.aspx</a>  Construct a table to present the data provided above. Make sure to include all 8 parts of a data table.		
Marking Scheme			
Part	Mark	Answer	Further Information
	0.5		Includes a table number

	1		Gives the table a relevant title
	0.5		Includes relevant column headings
	0.5		Includes relevant row headings
	0.5		Provides the unit of measurement
	0.5		States the source
	0.5		Includes a note
	1		Organises the data in the rows and columns correctly

#### 4. Constructed Response Questions

<b>Content domain (Chapter name)</b>	Chapter 4: Presentation of Data
<b>Content Domain Learning outcome</b>	CLO21. Presents data using geometric forms
<b>Indicator</b>	C48. Analyses a given statistical diagram and make recommendations for the same.
<b>Cognitive level</b>	Understanding
<b>Thinking Process</b>	Interpreting
<b>Difficulty level</b>	Medium
<b>Marks</b>	3 marks
<b>Time</b>	2-4 minutes
<b>Item stem</b>	Study the following bar diagram and answer the questions.



Source: [https://www.education.gov.in/sites/upload\\_files/mhrd/files/statistics-new/ESAG-2018.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/ESAG-2018.pdf)

- A. Is this a multiple bar diagram or a component bar diagram?
- B. Briefly discuss the results interpreted from the given bar diagram.

#### Marking Scheme

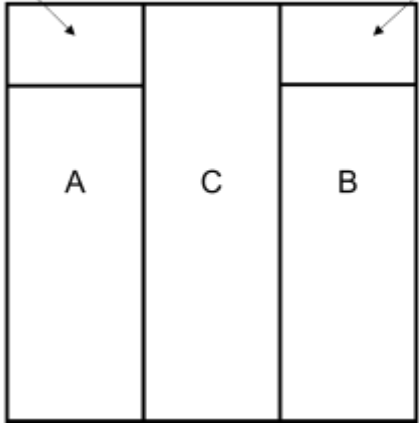
Part	Mark	Answer	Further Information
A	1		Correctly identifies the bar diagram as multiple
B	2		Provides a logical interpretation based on the diagram



## 5. Selection Response Questions

<b>Content domain (Chapter name)</b>	Chapter 3: Organisation of Data		
<b>Content Domain Learning outcome</b>	CLO11. Classifies the data for further statistical analysis		
<b>Indicator</b>	C30. Differentiates between all the different forms of classification of data		
<b>Cognitive level</b>	Applying		
<b>Thinking Process</b>	Utilizing		
<b>Difficulty level</b>	Medium		
<b>Marks</b>	2 marks		
<b>Time</b>	2-3 minutes		
<b>Item stem</b>	<p>Write if the following statements are true or false.</p> <p>A. A data table shows the yield of rice in kg/hectare in different states of the country for the year 2010. This is an example of chronological classification of data.</p> <p>B. A data table shows the number of steps walked by all the users of a step-tracking phone app. Such a table will use discrete variables.</p> <p>C. Volunteers go from door-to-door in all the villages of Andhra Pradesh, collecting information about the number of books in each household. This data is raw data or unclassified data.</p> <p>D. A bar diagram shows the growth of population in Asia from 1990 to 2006. This data can be classified chronologically.</p>		
<b>Marking Scheme</b>			
<b>Part</b>	<b>Mark</b>	<b>Answer</b>	<b>Further Information</b>
A	0.5	False	
B	0.5	False	
C	0.5	True	
D	0.5	True	

## 6. Constructed Response Questions

<b>Content domain (Chapter name)</b>	National Income Accounting
<b>Content Domain Learning outcome</b>	CLO9. Analyses basic national income aggregates.
<b>Indicator</b>	C24. Differentiates between Real and Nominal GDP.
<b>Cognitive level</b>	Apply
<b>Thinking Process</b>	Calculate
<b>Difficulty level</b>	Medium
<b>Marks</b>	5 marks
<b>Time</b>	3-5 minutes
<b>Item stem</b>	<p>The picture shows the conceptual framework of a nation's wealth.</p> <div style="text-align: center;"> <p>Net Factor Income from Abroad      Depreciation</p>  </div> <p>Identify A, B and C from the conceptual framework above.</p>

Part	Mark	Answer	Further Information
	1	Identifies A as GDP	
	1	Identifies B as NNP	
	1	Identifies C as GNP	

## 7. Constructed Response Questions

<b>Content domain (Chapter name)</b>	National Income Accounting		
<b>Content Domain Learning outcome</b>	CLO6. Explains the measurement of capital stock in an economy using net investment. CLO8. Explains Production, Intermediate Goods and Value Added.		
<b>Indicator</b>	C13. Articulates the concept of double counting in the calculation of national income and goods production.		
<b>Cognitive level</b>	Apply		
<b>Thinking Process</b>	Calculate		
<b>Difficulty level</b>	Medium		
<b>Marks</b>	2 marks		
<b>Time</b>	2-3 minutes		
<b>Item stem</b>	<p>110 metric tonnes of rice were produced in India in a particular year. 10 metric tonnes were used as an intermediate good for production of rice flour.</p> <p>Should the 10 metric tonnes of rice grains be included in the total production of the rice output in the country? Comment yes or no and validate your argument.</p>		
<b>Part</b>	<b>Mark</b>	<b>Answer</b>	<b>Further Information</b>
	0.5	Mention of the answer as no	
	1.5	Identifying it has double accounting	

## 8. Constructed Response Questions

<b>Content domain (Chapter name)</b>	National Income Accounting		
<b>Content Domain Learning outcome</b>	CLO10. Explains importance of calculating GDP.		
<b>Indicator</b>	C25. Evaluates how GDP of a country is taken as an index of the welfare.		
<b>Cognitive level</b>	Apply		
<b>Thinking Process</b>	Apply		
<b>Difficulty level</b>	Easy		
<b>Marks</b>	1 mark		
<b>Time</b>	1-2 minutes		
<b>Item stem</b>	A bread factory was releasing its by-products into the river nearby. A town downstream from the river was using this river as a water source. The water quality was reduced in the town.  Is what the bread factory did an externality? Justify your stance.		
<b>Part</b>	<b>Mark</b>	<b>Answer</b>	<b>Further Information</b>
	0.5	Recognises this as an externality	
	0.5	Justifies this situation as a negative social externality by the bread factory	

## 9. Constructed Response Questions

Content domain (Chapter name)	Money and Banking																				
Content outcome	CLO16. Outlines the process of money creation by the commercial banking system.																				
Indicator	C37. Creates a balance sheet of a fictional bank.																				
Cognitive level	Evaluate																				
Thinking Process	Evaluate																				
Difficulty level	Medium																				
Marks	3 marks																				
Time	4-5 minutes																				
Item stem	<div>The table shows a list of assets and liabilities of a private bank.</div> <table><tr><td>Assets/Liabilities of the Bank</td><td>Value in Lakh (₹)</td></tr><tr><td>Loans disbursed to private companies</td><td>50</td></tr><tr><td>Loans disbursed to individuals</td><td>18</td></tr><tr><td>Government bonds</td><td>20</td></tr><tr><td>Cash in bank safe</td><td>10</td></tr><tr><td>Deposits in current accounts</td><td>75</td></tr><tr><td>Deposits in savings accounts</td><td>30</td></tr><tr><td>Fixed deposits</td><td>38</td></tr><tr><td>Investment by banks in mutual funds</td><td>52</td></tr></table> <div>Identify the assets and the liabilities of the bank. As an economist, you have been asked to advise the bank on whether they should continue lending money. What would you advise?</div>			Assets/Liabilities of the Bank	Value in Lakh (₹)	Loans disbursed to private companies	50	Loans disbursed to individuals	18	Government bonds	20	Cash in bank safe	10	Deposits in current accounts	75	Deposits in savings accounts	30	Fixed deposits	38	Investment by banks in mutual funds	52
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Fixed deposits	38																				
Investment by banks in mutual funds	52																				
Part	Mark	Answer	Further Information																		

	1.5	Correctly identifies the assets and liabilities	
	0.5	Calculates the total assets and liabilities.	
	1	Gives explanation for their advice to the bank	

### 10. Multiple Choice Question (MCQ)

<b>Content Domain (Chapter name)</b>	Introduction	
<b>Content Domain Learning outcome</b>	CLO3. Explains the evolution of Macroeconomics.	
<b>Indicator</b>	C7. Understands the evolution of Macroeconomics. (And the contribution of John Maynard Keynes).	
<b>Cognitive level</b>	Knowledge	
<b>Thinking Process</b>	Recall	
<b>Difficulty level</b>	Easy	
<b>Marks</b>	1 mark	
<b>Time</b>	1 minute	
<b>Item Stem</b>	The General theory of Employment, Interest and Money was written by which economist?	
<b>Correct answer</b>	John Maynard Keynes	
<b>Distractor 1</b>	Adam Smith	
<b>Distractor 2</b>	Irving Fisher	
<b>Distractor 3</b>	Fredrich Hayek	



## 12. ESSENTIAL IDEAS AND ASSESSMENTS

### CLASS 11 – ASSESSMENTS BASED ON ESSENTIAL IDEAS

#### STATISTICS

##### Multiple-Choice Question

<b>Chapter</b>	Ch. 1: Introduction	
<b>Essential Idea</b>	Statistics is a tool that helps economists predict the future needs of the population.	
<b>Item stem + question</b>	A district in India wants to create a policy to help its population gain 100% literacy by 2030. From the following alternatives, identify the most appropriate parameter helpful in creating the policy.	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Quantitative measure of the number of teachers in the district.	Understands that the present number of teachers will be crucial in forming the policy to make students literate.
<b>Distractor 1</b>	Quantitative measure of the agricultural land available in the district.	Misunderstands that agricultural land and literacy levels are directly linked and could help in creating a literacy policy for the future.
<b>Distractor 2</b>	An understanding of the political and religious affiliations of the people in the district.	Misunderstands that social and political affiliations may have a direct impact on creating a literacy policy for the future.

<b>Distractor 3</b>	Quantitative measure of the death rate in the district.	Misunderstands that deaths and literacy levels are directly linked and could help in creating a literacy policy for the future.
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### Free Response Question

Chapter	Ch. 1: Introduction	
Essential Idea	The purpose of statistics is to analyse and understand data so that it informs policies to help the population.	
Item stem + question	Using the example of electricity consumption, explain how the use of statistics can be helpful in predicting change in demand of electricity in India. How can this information be useful in policy making?	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>Statistics is a tool which can help us understand present day economic situations and help create policies that help the population.</p> <p>Firstly, one would collect data on the present-day consumption of electricity in urban and rural areas. This will help in answering questions like how much electricity is presently consumed in India, what is the urban-rural split of this consumption. Second, one will need the statistics on the consumption 10 years ago. This helps understand the trend of electricity consumption in the recent past. Finally, one would also look at the statistics and data on the trends in other forms of energy consumption. These data along with statistical predictions on population growth in the next 10 years can help in predicting what will happen to electricity consumption in the future.</p> <p>Once these data are available and predictions on the trends of electricity consumption can be made, policy decisions like if we should incentivise or disincentivise the use of electricity can be made.</p>	

<b>Marking Rubric:</b> <b>Part 1</b>	Explains the use of statistics or data to understand and predict electricity usage.	2 marks
<b>Part 2</b>	Shows how this information is useful in creating policy.	1 mark

### Multiple-Choice Question

<b>Chapter</b>	Ch. 2: Collection of Data	
<b>Essential Idea</b>	Data can be collected by using census or sampling. When sampling is used, it is important to choose a random and representative part of the population.	
<b>Item stem + question</b>	<p>There is a population comprised of 63% pink people, 21% red people, 10% blue people and the rest are grey people. You need to do a survey in this population. For the survey, you have to pick a random sample of 100 people from this population. The sample had 65 pink people, 22 red people, 1 blue person and 11 grey people.</p> <p>Though this was a random sample, this is not a representative sample. What would you do next?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Conduct the survey after removing some grey people and adding some blue people.	Understands that the sample is random but not representative.
<b>Distractor 1</b>	Conduct the survey without any changes.	Misunderstands that the random sample will always be representative.
<b>Distractor 2</b>	Conduct the survey after adding more blue people to the survey and removing pink, red and grey people.	Misunderstands that a representative sample needs to be exactly in proportion with the population.
<b>Distractor 3</b>	Conduct the survey after removing some grey people.	Misunderstands the proportion of different types of people in the population.



### Free Response Question

Chapter	Ch. 2: Collection of Data	
Essential Idea	Surveys are an important way of collecting data and it involves creating unambiguous and specific questions and reaching out to people and getting their responses.	
Item stem + question	<p>Look at a survey question below.</p> <p><i>How much money do you spend on essentials every month? Please put the response in the space provided: ____.</i></p> <p>This question was part of survey to understand the spending habits of a group of people in an Indian city. Do you think this is a good question? If yes, justify. If not, can you suggest some changes to the question to make it better?</p>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>This is not a good question for multiple reasons.</p> <ol style="list-style-type: none"><li>1. It is ambiguous as it does not say what ‘essentials’ mean. The word ‘essentials’ may mean different things to different people taking the survey.</li><li>2. The question is asking for a response in the space provided. This will cause some confusion while analysing the results as there are no units given, it is assumed that it is in rupees. Secondly, it will be better to get an idea of the percentage of total income that is spent on this category. Unless another question in the survey also asks the total monthly income.</li><li>3. For ease of data analysis of the survey I would give the respondents options to choose from.</li></ol>	

	<p>The modified question may look something like this:</p> <p>How much money do you spend on groceries and monthly utility bills?</p> <p>A: 20% of monthly income</p> <p>B: 50% of monthly income</p> <p>C: More than 50% of monthly income</p>	
<b>Marking Rubric:</b>	Explains at least 3 points to improve the question	3 marks
<b>Part 1</b>		
<b>Part 2</b>	Shares improved question addressing points raised	1 mark



### Multiple-Choice Question

Chapter	Ch. 3: Organisation of Data																																															
Essential Idea	Collection of data points can be raw or classified quantitatively, qualitatively, temporally or spatially.																																															
Item stem + question	<p>Given is a partial table showing the population in India.</p> <table><tr><th>Ran k</th><th>City</th><th>Population (2011)</th><th>Population (2001)</th></tr><tr><td>1</td><td>Mumbai</td><td>12,442,373</td><td>11,978,450</td></tr><tr><td>2</td><td>Delhi</td><td>11,007,835</td><td>9,879,172</td></tr><tr><td>3</td><td>Bangalore</td><td>8,425,970</td><td>4,301,326</td></tr><tr><td>4</td><td>Hyderabad</td><td>6,809,970</td><td>3,637,483</td></tr><tr><td>5</td><td>Ahmedabad</td><td>5,570,585</td><td>3,520,085</td></tr><tr><td>6</td><td>Chennai</td><td>4,681,087</td><td>4,343,645</td></tr><tr><td>7</td><td>Kolkata</td><td>4,486,679</td><td>4,572,876</td></tr><tr><td>8</td><td>Surat</td><td>4,467,797</td><td>2,433,835</td></tr><tr><td>9</td><td>Pune</td><td>3,115,431</td><td>2,538,473</td></tr><tr><td>10</td><td>Jaipur</td><td>3,046,163</td><td>2,322,575</td></tr></table> <p>(Source: <a href="https://en.wikipedia.org/wiki/List_of_cities_in_India_by_population">https://en.wikipedia.org/wiki/List_of_cities_in_India_by_population</a>)</p> <p>On what basis has the data been classified?</p>				Ran k	City	Population (2011)	Population (2001)	1	Mumbai	12,442,373	11,978,450	2	Delhi	11,007,835	9,879,172	3	Bangalore	8,425,970	4,301,326	4	Hyderabad	6,809,970	3,637,483	5	Ahmedabad	5,570,585	3,520,085	6	Chennai	4,681,087	4,343,645	7	Kolkata	4,486,679	4,572,876	8	Surat	4,467,797	2,433,835	9	Pune	3,115,431	2,538,473	10	Jaipur	3,046,163	2,322,575
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10	Jaipur	3,046,163	2,322,575																																													

	Option	Reason/Explanation for this option
<b>Correct answer</b>	Based on time, space and quantity.	Understands that this data set has populations of different cities (space) given in rank order (quantitative), for two different years (time).
<b>Distractor 1</b>	Based on time and space.	Missed the fact that the cities are ranked based on of the population.
<b>Distractor 2</b>	Based on time.	Missed the fact that cities have been mentioned and ranked based on the population.
<b>Distractor 3</b>	Based on space.	Missed the fact that there are two time points when the population was measured.

### Free Response Question

Chapter	Ch. 3: Organisation of Data	
Essential Idea	Variables are either discrete or continuous. Quantitative data can be shown as a frequency distribution.	
Item stem + question	In a survey done on a sample of a population, it was found that the population had the following features: Males – 55% Females – 42%  Can you represent this data on a frequency distribution? If yes, draw the frequency distribution for the given data. If not, give a reason for why this data cannot be represented as a frequency distribution.	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	The survey done was for the qualitative trait of gender. Qualitative traits cannot be represented on a frequency distribution. Even though there are percentage numbers, these numbers describe a quality (gender) of the sample.  A frequency distribution can be made of quantitative traits. If there was data on the income earned by the sample, that could be represented as a frequency distribution.	
Marking Rubric: Part 1	Identifies gender as a qualitative form of data	1 mark
Part 2	Makes the argument that frequency distributions can only be created for quantitative data	1 mark

### Multiple-Choice Question

Chapter	Ch. 4: Presentation of Data																	
Essential Idea	Depending on the message to be derived, data cane be presented in multiple tabular or diagrammatic forms.																	
Item stem + question	<p>Given is a table with the percent of different molecules in the human body.</p> <table><tr><th>Molecule</th><th>% of mass</th></tr><tr><td>Water</td><td>65</td></tr><tr><td>Other inorganics</td><td>1.5</td></tr><tr><td>Lipids</td><td>12</td></tr><tr><td>Other organics</td><td>0.4</td></tr><tr><td>Protein</td><td>20</td></tr><tr><td>RNA</td><td>1</td></tr><tr><td>DNA</td><td>0.1</td></tr></table> <p>(Source: Wikipedia)</p> <p>What would be the best way of representing this data diagrammatically?</p>		Molecule	% of mass	Water	65	Other inorganics	1.5	Lipids	12	Other organics	0.4	Protein	20	RNA	1	DNA	0.1
Molecule	% of mass																	
Water	65																	
Other inorganics	1.5																	
Lipids	12																	
Other organics	0.4																	
Protein	20																	
RNA	1																	
DNA	0.1																	
	Option	Reason/Explanation for this option																
Correct answer	Component bar diagram and pie diagram.	Understands that proportions or percentages are best represented as parts of a whole in pie diagrams and component bar diagrams.																

<b>Distractor 1</b>	Component bar diagram.	Missed that pie diagrams also help in showing proportions of a whole.
<b>Distractor 2</b>	Pie diagram.	Missed that component bar diagrams also help in showing proportions of a whole.
<b>Distractor 3</b>	Frequency polygon.	Misunderstands what frequency polygons represent.

### Free Response Question

<b>Chapter</b>	Ch. 4: Presentation of Data																																
<b>Essential Idea</b>	Only small quantity data is presented as text. Other data is either tabular or diagrammatic.																																
<b>Item stem + question</b>	<p>Given is the distribution of the wages earned by daily wage earners in a town.</p> <p style="text-align: center;"><b>Distribution of daily wage earners in a locality of a town</b></p> <table> <tr> <th>Daily earning (Rs)</th><th>No. of wage earners (f)</th></tr> <tr><td>45-49</td><td>2</td></tr> <tr><td>50-54</td><td>3</td></tr> <tr><td>55-59</td><td>5</td></tr> <tr><td>60-64</td><td>3</td></tr> <tr><td>65-69</td><td>6</td></tr> <tr><td>70-74</td><td>7</td></tr> <tr><td>75-79</td><td>12</td></tr> <tr><td>80-84</td><td>13</td></tr> <tr><td>85-89</td><td>9</td></tr> <tr><td>90-94</td><td>7</td></tr> <tr><td>95-99</td><td>6</td></tr> <tr><td>100-104</td><td>4</td></tr> <tr><td>105-109</td><td>2</td></tr> <tr><td>110-114</td><td>3</td></tr> <tr><td>115-119</td><td>3</td></tr> </table> <p>One can represent the data as a frequency distribution or an ogive.</p>	Daily earning (Rs)	No. of wage earners (f)	45-49	2	50-54	3	55-59	5	60-64	3	65-69	6	70-74	7	75-79	12	80-84	13	85-89	9	90-94	7	95-99	6	100-104	4	105-109	2	110-114	3	115-119	3
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105-109	2																																
110-114	3																																
115-119	3																																

	<div>A. What is the difference between the two representations? What is the difference in the type of questions that can be answered looking at the two different representations?</div> <div>B. How many daily wage earners earn more than ₹95 daily? How many daily wage earners earn at least ₹50, but not more than ₹90 daily?</div>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<div>A. A frequency distribution is a way to classify raw data of a quantitative variable. It shows how different values of the wages are distributed. It can answer a question like, how many daily wage earners earn between ₹70 and ₹80 a day.</div> <div>Ogive is also called cumulative frequency curve, which means that the diagram shows how many daily wage earners earn more than or less than a particular wage. For example, it can answer a question like, how many daily wage earners earn more than ₹100 a day.</div> <div>B. Daily wage earners earning more than ₹95: 18 daily wage earners</div> <div>Daily wage earners earning between ₹50 and ₹90: 58 daily wage earners</div>	
Marking Rubric: Part A.1	Explains what a frequency distribution is. Explains the type of question that can be answered by a frequency distribution.	1 mark
Part A.2	Explains what an ogive is. Explains the type of question that can be answered by an ogive.	1 mark
Part B.1	Correctly calculates the number of daily wage earners earning more than ₹95.	1 mark
Part B.2	Correctly calculates the number of daily wage earners earning between ₹50 and ₹90.	1 mark





### Multiple-Choice Question

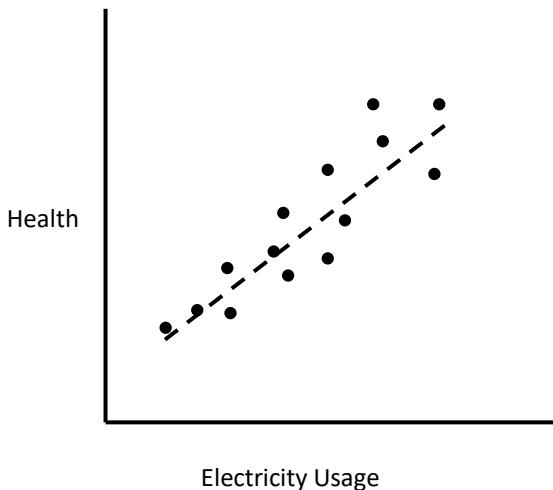
<b>Chapter</b>	Ch. 5: Measures of Central Tendencies	
<b>Essential Idea</b>	Mean, median and mode are three measures of central tendencies of data. The measures of central tendencies give us information of the sample.	
<b>Item stem + question</b>	<p>Srilaxmi has graduated and is looking for a job. She applied to various organisations and has got an offer with a salary. She wants to find out if the salary offered to her is fair.</p> <p>What should she do?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Compare the salary offered to the median salary offered over the last 2 years.	Understands the best use of central tendencies to compare between a data point and the population.
<b>Distractor 1</b>	Compare the salary offered to her with the average salary of her college teachers.	Misses the point that the college teachers have a different job and have a different experience, so may not be a comparable sample.
<b>Distractor 2</b>	Compare the salary offered with the salary offered to her friend who has been working in the same company for 3 years.	Misses the point that her friend has been working for 3 years, so may not be a comparable sample.
<b>Distractor 3</b>	Compare the salary offered to the most frequently offered salary over the last 2 years.	Misses the point that even if it is the most frequent salary it may not be a fair amount.

### Free Response Question

Chapter	Ch. 5: Measures of Central Tendencies																																							
Essential Idea	Depending on the problem to be solved or question to be answered, the appropriate measure of central tendencies must be used.																																							
Item stem + question	<p>ISRO has planned a space mission. The astronauts to undertake this mission are still to be selected from the list given in the table. The mission requires the astronauts to wear a space suit. ISRO needs to order the space suits before they can select the astronauts. They need to share the shoulder size of the astronauts with the space suit manufacturer.</p> <table><tr><th>Participant</th><th>Gender</th><th>Shoulder width (cm)</th></tr><tr><td>1</td><td>M</td><td>34</td></tr><tr><td>2</td><td>M</td><td>36</td></tr><tr><td>3</td><td>M</td><td>35</td></tr><tr><td>4</td><td>F</td><td>29</td></tr><tr><td>5</td><td>M</td><td>32</td></tr><tr><td>6</td><td>F</td><td>30</td></tr><tr><td>7</td><td>M</td><td>36</td></tr><tr><td>8</td><td>M</td><td>35</td></tr><tr><td>9</td><td>F</td><td>28</td></tr><tr><td>10</td><td>F</td><td>29</td></tr><tr><td>11</td><td>F</td><td>28</td></tr><tr><td>12</td><td>F</td><td>27</td></tr></table> <p>(Source: <a href="https://www.researchgate.net/publication/237070026">https://www.researchgate.net/publication/237070026</a>)</p>	Participant	Gender	Shoulder width (cm)	1	M	34	2	M	36	3	M	35	4	F	29	5	M	32	6	F	30	7	M	36	8	M	35	9	F	28	10	F	29	11	F	28	12	F	27
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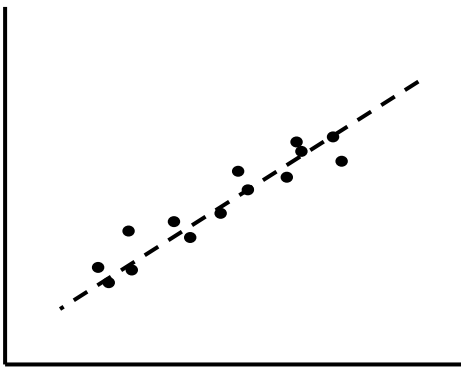
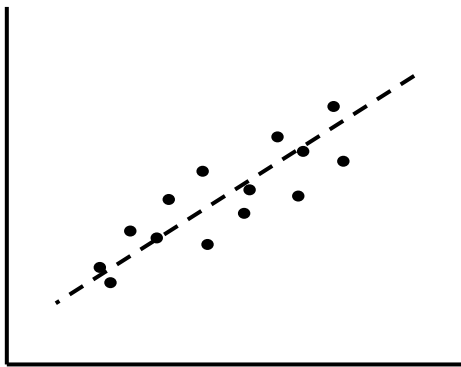
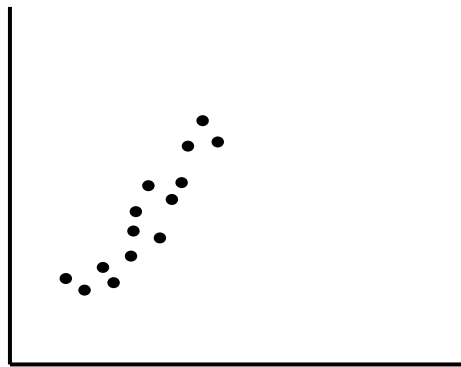
	Can ISRO use any measure of central tendencies of the shoulder size? If yes, which one? If not, why not?	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>ISRO should NOT share the mean of the shoulder sizes. The mean here is 31.5 which will not fit any of the astronauts.</p> <p>There are 3 modes in the data. This means that we can select all these three as sizes and share it with the manufacturer to make suits of all these sizes. But if these astronauts with the modal sizes do not get selected for the mission, it may cause wastage.</p> <p>The median size for this data is 31, which means that the space suit will not fit any astronaut.</p> <p>This means that ISRO cannot use any measures of central tendencies and will have to find a different way to solve this problem.</p>	
Marking Rubric: Part 1	Identifies the problem with using mean to solve the problem.	1 mark
Part 2	Identifies the problem with using median to solve the problem.	1 mark
Part 3	Identifies the problem with using mode to solve the problem.	1 mark

### Multiple-Choice Question

<b>Chapter</b>	Ch. 7: Correlation	
<b>Essential Idea</b>	Correlation shows the intensity and direction of the relationship between two variables. Pearson's Coefficient and Spearman's Rank Coefficient are measures to calculate the same.	
<b>Item stem + question</b>	<p>A study done in a district in India measured the relationship between household electricity usage and health of the occupants of the house. The data is shown in the image.</p>  <p>What is the most likely explanation for this relationship?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>

<b>Correct answer</b>	Electricity usage and health are both related to another variable – money, which explains the relationship.	Understands that the variables used in the study are linked to a third variable giving rise to a relationship.
<b>Distractor 1</b>	Using electricity increases the health of the occupants of the house.	Misunderstands the underlying cause for the correlation.
<b>Distractor 2</b>	Electricity is needed for a healthy life.	Misunderstands the underlying cause for the correlation.
<b>Distractor 3</b>	Electricity and health are both related just by coincidence.	Misunderstands that this is a coincidental relationship.

### Free Response Question

<b>Chapter</b>	Ch. 7: Correlation
<b>Essential Idea</b>	Correlation shows the intensity and direction of the relationship between two variables. Pearson's Coefficient and Spearman's Rank Coefficient are measures to calculate the same.
<b>Item stem + question</b>	<p>Look at the graphs given.</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <p>Graph A</p> <p>Graph B</p> <p>Graph C</p> </div> <p>Compare and comment on the Pearson's Coefficient for the relations shown in three graphs.</p>
<b>Sample Answer and Marking Rubric</b>	

Part	Description	Marks
<b>Sample answer</b>	<p>Pearson's Coefficient is the measure of the direction and intensity of the correlation between two variables. The number of data points is same in all cases.</p> <p>In Graph A and Graph B, the Pearson's Coefficient will be positive number between 0 and 1 because there is a positive linear correlation between the two variables. Moreover, the Pearson's Coefficient for the data given in Graph A will be higher than for the data given in Graph B because the intensity of the correlation is higher in Graph A than Graph B. This is shown by how tightly the points are around the imaginary correlation line.</p> <p>The relationship in Graph C is also a positive correlation, but the correlation is not linear. Comparing this with Pearson's correlation of linear relationships in Graph A and B is not prudent.</p>	
<b>Marking Rubric:</b>	Mentions the coefficient to be a positive number and calls it a positive linear correlation.	1 mark
<b>Part 1</b>		
<b>Part 2</b>	Compares between the coefficients of Graph A and Graph B correctly.	1 mark
<b>Part 3</b>	Correctly identifies the relationship in Graph C as a non-linear relationship and does not compare it with other graphs.	1 mark

### Multiple-Choice Question

<b>Chapter</b>	Ch. 8: Index Numbers	
<b>Essential Idea</b>	Index numbers are affected by the base year selected and the weighting of different related commodities.	
<b>Item stem + question</b>	<p>The government of a country has decided to create a new index to measure the progress made in the standard of living of the country. They have decided to use 2020 as the base year to measure changes in the index.</p> <p>Is this a good idea?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	No. Because 2020 was an unusual year for all economic activities due to the CoVID-19 pandemic.	Understands that the base year needs to be a representative year for the economic activities of that time.
<b>Distractor 1</b>	Yes. Because 2020 gives a low reference point which helps in accurately measuring the change in the standard of living.	Misunderstands the quality of base year needed and how choosing this year will give inflated results of progress.
<b>Distractor 2</b>	Yes. Because 2020 is a round number and can help with calculations.	Misunderstands what a base year is.
<b>Distractor 3</b>	No. Because 2020 too far in the past to give any meaningful information on the changes.	Misunderstands the main reason for not using 2020 as a base year.



### Free Response Question

Chapter	Ch. 8: Index Numbers	
Essential Idea	Index numbers help in measuring the changes in magnitude in a group of related variables. These indices help in creating policies.	
Item stem + question	<p>The consumer price index (CPI) measures the average change in retail prices. The CPI of a country changed from base year 2000 (=100) to 278 in 2022.</p> <p>The salary for a clerk in 2000 was ₹10,000. The salary of the same position in 2022 is ₹17,000.</p> <p>Is the increase in salary fairly justified with respect to CPI changes?</p>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>The CPI measures the change in the ability to buy a certain collection of items. In 2000 the collection of items could be bought for say ₹100, while it takes ₹278 in 2022. This is what the CPI indicates.</p> <p>The cost of buying items has gone up 2.78 times (278/100). The salary of a clerk has gone up 1.7 times (17000/10000). The person working as a clerk in 2022 will not be able to buy the all the items that the clerk working in 2000 was able to buy. To ensure that the clerk in 2022 can buy all the items that a clerk in 2000 could buy the 2022 salary of the clerk should be 2.78 times that of the salary of the 2000 clerk. That means the salary should be ₹27,800 in 2022 instead of ₹17,000.</p> <p>So the salary change is not fair, and it needs to be increased by ₹10,800.</p>	

<b>Marking Rubric:</b> <b>Part 1</b>	Explains the meaning of CPI.	1 mark
<b>Part 2</b>	Provides explanation with calculations for the argument of why the salary should be increased in 2022.	2 marks
<b>Part 3</b>	States the salary increase.	1 mark

### Multiple-Choice Question

<b>Chapter</b>	Ch. 9: Use of Statistical Tools	
<b>Essential Idea</b>	Statistical tools can be used in projects that help answer questions about the economy and society.	
<b>Item stem + question</b>	<p>Prashant works at a company that has multiple restaurants in Chennai. He has been asked to create a report on whether it is feasible for his company to open a new branch of their restaurant in Madurai. For this, he has decided to do a survey to find out whether a branch of the restaurant will be successful in Madurai.</p> <p>Who should be his target audience for the survey?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Middle- and higher-income groups of Chennai and Madurai, both.	Understands that the survey will need to understand why the restaurant works in Chennai, and if it will work in Madurai.
<b>Distractor 1</b>	All income groups in Chennai and Madurai.	Misunderstands who will be the groups frequenting the restaurant.
<b>Distractor 2</b>	Middle- and higher-income groups of Madurai.	Misunderstands that the lessons for the success of the Chennai restaurants will not be helpful.
<b>Distractor 3</b>	All income groups in Madurai.	Misunderstands demography of target group and that the lessons for the success of the Chennai restaurants will not be helpful.

### Free Response Question

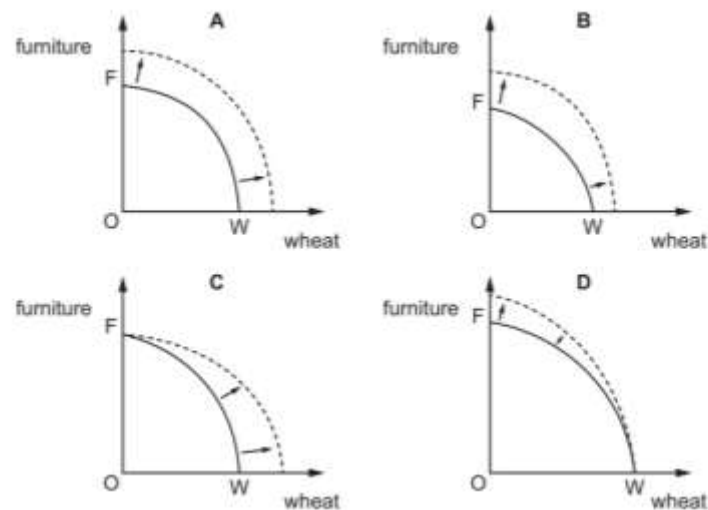
Chapter	Ch. 9: Use of Statistical Tools	
Essential Idea	Statistical tools can be used in projects that help answer questions about the economy and society.	
Item stem + question	You are asked to prepare a report on the vaccination programme in India against the CoVID-19 virus.  What are the major headings that you would like to have in the report? Or what major questions would be answered by the report?	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	The report should answer the following major questions: 1. How many Indians have received one, two and three shots of the vaccine? 2. When did the vaccines become available to the Indian public? What has the availability been over time? 3. How does the availability of vaccines compare to the number of people still needing vaccines? 4. What are the different sources of vaccines? What proportion of vaccines has each source contributed? 5. What is the evidence to show the efficacy of the vaccines from different sources? 6. How much money has the government spent in procuring, producing and distributing the vaccines? 7. How much has it cost the people to get vaccines?	

	8. What is the role of the government hospitals and private hospitals in the vaccination programme?	
<b>Marking Rubric:</b> <b>Part 1</b>	Raises 4 relevant questions. (1 mark per question/point)	4 marks

## MICROECONOMICS

### Multiple-Choice Question

<b>Chapter</b>	Chapter 1: Introduction
<b>Essential Idea</b>	The subject of economics has grown out of the fundamental economic problem. When resources are limited, choices have to be made. A simple model, the Production Possibility Curve, is used to show how the fundamental economic problem applies in an economy.
<b>Item stem + question</b>	<p>Economy X uses its resources in the labour-intensive production of wheat and wooden furniture as shown by the production possibility curve FW. With the help of new strains of wheat seeds, X increased yields and shifted to a new production possibility curve.</p> <p>Which diagram depicts this change?</p>



	Option	Reason/Explanation for this option
<b>Correct answer</b>	C	PPC rotates to the right for wheat thus increasing its production while for the furniture it remains the same.
<b>Distractor 1</b>	A	There is change in productive capacity with respect to only one good, hence shift cannot happen.
<b>Distractor 2</b>	B	Even shift by an unequal proportion cannot take place, as only production of wheat has to increase.
<b>Distractor 3</b>	D	Productive capacity for furniture has not increased, hence this rotation isn't possible.

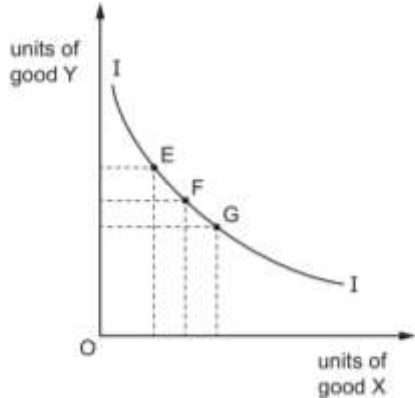
### Free Response Question

Chapter	Chapter 1: Introduction	
Essential Idea	The ownership of resources in an economy depends upon the economic systems. It’s therefore useful to assess the different economic systems that are used to allocate scarce resources and consider the features of each of them. This highlights the key concept of decision making.	
Item stem + question	Discuss the most significant issues of transition that a country may face as it moves from a socialistic economy to a mixed economy.	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>The issues of transition:</p> <ul style="list-style-type: none"><li>• In a planned economy, the state can play a key role in keeping prices stable, but in a mixed economy at least some of the prices are determined by the forces of demand and supply, so there is more price instability and possibly inflation</li><li>• In a planned economy, the state can support relatively inefficient firms and industries, but in a mixed economy, these firms and industries, if inefficient, may not survive and so there may be a fall in output</li><li>• Private sector firms will aim to maximise profits, but this could lead to them laying off some workers, increasing the level of unemployment</li><li>• There may be a greater likelihood of industrial unrest in a mixed economy than in a planned economy</li></ul>	6 marks



	<ul style="list-style-type: none"> <li>• Possibly new international trading relationships will need to be established</li> <li>• In a planned economy, the state can provide welfare support for everybody; in a mixed economy, there may be a reduction in the level of welfare provision</li> <li>• The specialised markets and services that will be required, e.g., banking and legal services, may take a long time to become sufficiently established</li> </ul>	
<b>Marking Rubric:</b>  <b>Part 1</b>	Analysis: The issues of transition: <ul style="list-style-type: none"> <li>• Inflation • Output • Employment/Unemployment • Industrial unrest • International trade • Welfare • Specialised support markets and services</li> </ul>	Allow up to <b>2 marks</b> for <b>each issue</b> analysed ( <b>Any 3 issues to be explained</b> )

### Multiple-Choice Question

<b>Chapter</b>	Chapter 2: Theory of Consumer Behaviour	
<b>Essential Idea</b>	Economists have long been interested in the way that consumers behave. We examine the motivation and behaviour of individual consumers via the cardinal and ordinal utility (Indifference Curve) analysis and come up with the optimal choice of the consumer.	
<b>Item stem + question</b>	<p>To analyse a consumer's preferences, an indifference curve represents possible combinations of goods X and Y.</p> <p>The diagram shows a consumer's indifference curve for good X and good Y.</p>  <p>What can be concluded from the diagram?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>

<b>Correct answer</b>	Points E, F and G are equally desirable combinations	All the points on an indifference curve give the same level of satisfaction.
<b>Distractor 1</b>	Point E is the most desirable combination	It lies on the top, but that doesn't represent the most desirable combination.
<b>Distractor 2</b>	Point F is less desirable than point G	Both the points are equally desirable.
<b>Distractor 3</b>	Point G is the least desirable combination	It lies at the bottom but that doesn't represent the least desirable combination.

### Free Response Question

Chapter	Chapter 2: Theory of Consumer Behaviour	
Essential Idea	It’s useful to learn why consumers demand certain goods and not others. In the process, it becomes crucial to understand the direction of change in demand when a good is normal vs when it’s inferior. The concept of elasticity is applied to show the extent of this change.	
Item stem + question	A car manufacturer makes 150 cars in a month. The manufacturer is looking to maximise profits.  How will the knowledge of price elasticity of demand (PED) for the car be useful to the manufacturer in maximising profits?	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>PED is defined as the percentage change in the quantity demanded of a good by the percentage change in price.</p> <p><b>Price Elasticity of Demand (PED) = <math>\frac{\% \text{ change in Q.D.}}{\% \text{ change in Price}}</math></b></p> <p>:: If the PED&lt;1 (inelastic demand for a car), the manufacturer can increase the price and revenue earned can increase as the quantity demanded would not fall much owing to the inelastic demand.</p> <p>:: If the PED&gt;1 (elastic demand for a car), the manufacturer needs to reduce the price, to increase the quantity demanded and thus increase the revenue. In case the manufacturer increases the price, the demand will fall many folds and he is going to lose out on his customers, given the demand is elastic.</p>	6 marks

	Hence, if the manufacturer sees that there is an inelastic demand for the car, they will be safely be able to increase the price of the car without any danger of the demand reducing.	
<b>Marking Rubric: Part 1</b>	Define PED and provide the formula	2 marks
<b>Part 2</b>	Explain the situation of $PED < 1$ and its usefulness	2 marks
<b>Part 3</b>	Explain the situation of $PED > 1$ and its usefulness	2 marks

### Multiple-Choice Question

Chapter	Chapter 3: Production and Costs																																																																																																
Essential Idea	The demand for factors of production comes from the producers who wish to use them to produce goods. It certainly becomes important to explain how firms make decisions on how much they should produce (total, marginal and average product) at margin and the short and long run costs involved in the process.																																																																																																
Item stem + question	<p>The following table gives information about a firm’s costs depending on the units of goods it manufactures.</p> <p>(TFC = Total Fixed Cost, TVC = Total Variable Cost, TC = Total Cost, AFC = Average Fixed Cost, AVC = Average Variable Cost, SAC = Short-run Average Cost, SMC = Short-run Marginal Cost)</p> <table><tr><th>Output (units) (q)</th><th>TFC (Rs)</th><th>TVC (Rs)</th><th>TC (Rs)</th><th>AFC (Rs)</th><th>AVC (Rs)</th><th>SAC (Rs)</th><th>SMC (Rs)</th></tr><tr><td>0</td><td>20</td><td>0</td><td>20</td><td>–</td><td>–</td><td>–</td><td>–</td></tr><tr><td>1</td><td>20</td><td>10</td><td>30</td><td>20</td><td>10</td><td>30</td><td>10</td></tr><tr><td>2</td><td>20</td><td>18</td><td>38</td><td>10</td><td>9</td><td>19</td><td>8</td></tr><tr><td>3</td><td>20</td><td>24</td><td>44</td><td>6.67</td><td>8</td><td>14.67</td><td>6</td></tr><tr><td>4</td><td>20</td><td>29</td><td>49</td><td>5</td><td>7.25</td><td>12.25</td><td>5</td></tr><tr><td>5</td><td>20</td><td>33</td><td>53</td><td>4</td><td>6.6</td><td>10.6</td><td>4</td></tr><tr><td>6</td><td>20</td><td>39</td><td>59</td><td>3.33</td><td>6.5</td><td>9.83</td><td>6</td></tr><tr><td>7</td><td>20</td><td>47</td><td>67</td><td>2.86</td><td>6.7</td><td>9.57</td><td>8</td></tr><tr><td>8</td><td>20</td><td>60</td><td>80</td><td>2.5</td><td>7.5</td><td>10</td><td>13</td></tr><tr><td>9</td><td>20</td><td>75</td><td>95</td><td>2.22</td><td>8.33</td><td>10.55</td><td>15</td></tr><tr><td>10</td><td>20</td><td>95</td><td>115</td><td>2</td><td>9.5</td><td>11.5</td><td>20</td></tr></table> <p>The manufacturer wants to make a 100% profit on the cost per good produced. Market constraints need the manufacturer to maintain the price of the good at ₹20.</p> <p>What would be the optimal number of units to produce to ensure a 100% profit to the manufacturer if the selling price is ₹20?</p>	Output (units) (q)	TFC (Rs)	TVC (Rs)	TC (Rs)	AFC (Rs)	AVC (Rs)	SAC (Rs)	SMC (Rs)	0	20	0	20	–	–	–	–	1	20	10	30	20	10	30	10	2	20	18	38	10	9	19	8	3	20	24	44	6.67	8	14.67	6	4	20	29	49	5	7.25	12.25	5	5	20	33	53	4	6.6	10.6	4	6	20	39	59	3.33	6.5	9.83	6	7	20	47	67	2.86	6.7	9.57	8	8	20	60	80	2.5	7.5	10	13	9	20	75	95	2.22	8.33	10.55	15	10	20	95	115	2	9.5	11.5	20
Output (units) (q)	TFC (Rs)	TVC (Rs)	TC (Rs)	AFC (Rs)	AVC (Rs)	SAC (Rs)	SMC (Rs)																																																																																										
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10	20	95	115	2	9.5	11.5	20																																																																																										

	Option	Reason/Explanation for this option
<b>Correct answer</b>	7 units	Lowest SAC which will maximise profits and keep the profit margin over 100%.
<b>Distractor 1</b>	1 unit	Misconception that TC determine the profit margin of goods.
<b>Distractor 2</b>	5 units	SAC is not the lowest and the profit margin will be less than 100%.
<b>Distractor 3</b>	10 units	Misconception that profit is always highest when the number of units of goods is the most.

### Free Response Question

Chapter	Chapter 3: Production and Costs	
Essential Idea	The demand for factors of production comes from the producers who wish to use them to produce goods. It certainly becomes important to explain how firms make decisions on how much they should produce (total, marginal and average product) at margin and the short and long run costs involved in the process.	
Item stem + question	Discuss whether the calculation of a marginal cost or an average cost is more significant in reaching conclusions about economic efficiency.	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>Social efficiency/allocative efficiency (price=marginal cost: producing best combination of goods needed by consumers) requires that marginal social costs and marginal social benefits are equal at the point of output. For productive efficiency (producing maximum output at minimum cost) to occur the firm is producing at its lowest average cost for the output concerned. (Not necessarily the lowest overall average cost)</p> <p>Economic Efficiency is the sum total of productive and allocative efficiency, therefore both average and marginal cost are significant.</p>	6 marks
Marking Rubric:	Explaining efficiency	2 marks



<b>Part 1</b>		
<b>Part 2</b>	Analysing allocative efficiency and marginal cost	2 marks
<b>Part 3</b>	Analysing productive efficiency and average cost	2 marks

### Multiple-Choice Question

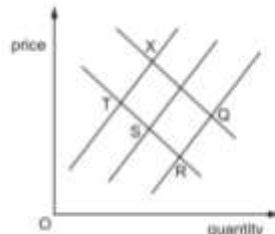
<b>Chapter</b>	Chapter 4: The Theory of the Firm under Perfect Competition	
<b>Essential Idea</b>	Perfect Competition is an ideal market structure with many firms producing identical products. The amount they receive from selling the products also called as revenue is an essential element (along with the cost) in understanding the conditions for profit maximisation.	
<b>Item stem + question</b>	A firm is operating in a perfect competition market without saturation of the product in the market. What will be the effect on the firm's revenue if it increases its output by 5%?	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Its revenue will increase by 5%	Under perfect competition the price remains the same as the firms are price takers. Therefore, revenue increases by same percentage as increase in output.
<b>Distractor 1</b>	Its revenue will be unchanged	This assumes price will fall to keep the revenue unchanged as output increases which is false
<b>Distractor 2</b>	Its revenue will increase by less than 5%	Not possible under perfect competition
<b>Distractor 3</b>	Its revenue will increase by more than 5%	Not possible under perfect competition as identical products are being sold, so no basis for extra gain in revenue.

### Free Response Question

Chapter	Chapter 4: The Theory of the Firm under Perfect Competition	
Essential Idea	Demand for a product is met by its supply. Price elasticity of supply is concerned with change. This is how businesses make choices when the price of their product changes. It’s intriguing to learn that there are clear differences in the speed and ease with which this change can occur.	
Item stem + question	Price elasticity of supply of manufactured goods is higher than that of agricultural products. Justify giving reasons.	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>Price elasticity of supply is a measure of the sensitivity of (quantity) supplied of a good or service to a change in the price of that good or service.</p> <div><math display="block">\text{Price Elasticity of Supply (PES)} = \frac{\% \Delta \text{in } Q_s}{\% \Delta \text{in } P}</math></div> <p>Overall, the supply of manufactured goods tends to be more price elastic than the supply of agricultural goods:</p> <p>Manufactured products</p> <p>-Mass production using integrated production lines - exploiting technical economies of scale</p>	6 marks

	<ul style="list-style-type: none"> <li>-Easier to store finished goods</li> <li>-Firms have spare capacity / can lay on extra production shifts</li> </ul> <p>Agricultural goods</p> <ul style="list-style-type: none"> <li>-Often harder to store because goods are perishable / expensive to keep refrigerated</li> <li>-"Set growing seasons" might mean production period is longer</li> <li>-Unpredictable supply because of the impact of volatile climate</li> </ul>	
<b>Marking Rubric: Part 1</b>	Meaning of price elasticity of supply along with the formula	2 marks
<b>Part 2</b>	Explanation for manufactured goods	2 marks
<b>Part 3</b>	Explanation for agricultural goods	2 marks

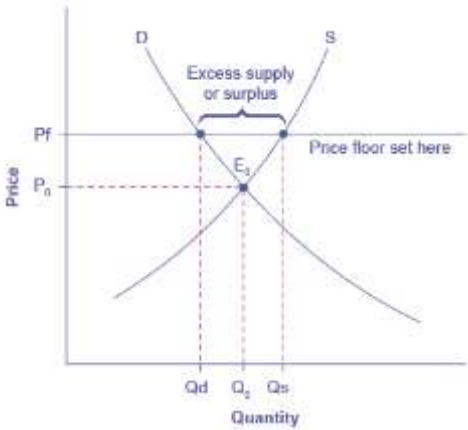
### Multiple-Choice Question

Chapter	Chapter 5: Market Equilibrium																					
Essential Idea	A market is in equilibrium when quantity demanded equals quantity supplied but in real world, it's usual to witness excess demand or excess supply in the market. It's imperative to understand simple models of market that show what happens when there is a change in a market and how change affects price and quantity traded by consumers and producers.																					
Item stem + question	<p>Prices of gold, silver and copper fell considerably in 2011 and again in 2015. The fall in 2011 was said to be because miners increased production. The fall in 2015 was because demand, especially from China, decreased.</p> <p>If the equilibrium before 2011 was X, how would these movements in 2011 and subsequently in 2015 be shown on the demand and supply diagram?</p> <div><table border="1" data-bbox="508 989 875 1169"><thead><tr><th></th><th>initial equilibrium</th><th>2011 equilibrium</th><th>2015 equilibrium</th></tr></thead><tbody><tr><td>A</td><td>X</td><td>Q</td><td>R</td></tr><tr><td>B</td><td>X</td><td>R</td><td>Q</td></tr><tr><td>C</td><td>X</td><td>S</td><td>R</td></tr><tr><td>D</td><td>X</td><td>T</td><td>S</td></tr></tbody></table></div>			initial equilibrium	2011 equilibrium	2015 equilibrium	A	X	Q	R	B	X	R	Q	C	X	S	R	D	X	T	S
	initial equilibrium	2011 equilibrium	2015 equilibrium																			
A	X	Q	R																			
B	X	R	Q																			
C	X	S	R																			
D	X	T	S																			
	Option	Reason/Explanation for this option																				

<b>Correct answer</b>	A	X is the original point of equilibrium, then the supply curve shifts to right due to increase in production and Q is the new equilibrium for 2011. For 2015 the demand curve shifts to the left/downwards and R becomes the new equilibrium.
<b>Distractor 1</b>	B	This option shows the effect of 2015 first and then 2011 hence incorrect.
<b>Distractor 2</b>	C	Incorrect representation of equilibrium due to wrong shift of curves.
<b>Distractor 3</b>	D	Incorrect representation of equilibrium due to wrong shift of curves.

### Free Response Question

Chapter	Chapter 5: Market Equilibrium	
Essential Idea	When the markets fail or is not able to provide the best allocation of resources, governments find it necessary to intervene in markets. One of the means to do this is - controlling prices in the market via the method of price floor and price ceiling.	
Item stem + question	Explain, with the help of a diagram, how a free market would react if a minimum price which had been set above the equilibrium is removed.	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<ul style="list-style-type: none"><li>• The guaranteed minimum price or price floor, set above the equilibrium, would be removed</li><li>• This would lead to the excess supply disappearing</li><li>• The market would revert to an equilibrium position, leading to a fall in price with an increased quantity traded</li><li>• There would neither be an excess supply nor an excess demand in the free market: the quantity demanded will increase and the quantity supplied will reduce, so eliminating the excess</li><li>• A market clearing position would be established</li><li>• The impact on the producer revenue will depend on the elasticities of demand and supply</li></ul>	6 marks (4+2)

		
<b>Marking Rubric:</b>  <b>Part 1</b>	For correct diagram: <ul style="list-style-type: none"> <li>• axes correctly labelled</li> <li>• market equilibrium shown</li> <li>• minimum price shown above equilibrium</li> <li>• reference to the existence of excess supply</li> </ul>	2 marks
<b>Part 2</b>	Explanation of the scenario	4 marks



## CLASS 12 – ASSESSMENTS BASED ON ESSENTIAL IDEAS

### MACROECONOMICS

#### Multiple-Choice Question

<b>Chapter</b>	Chapter 1: Introduction	
<b>Essential Idea</b>	Macroeconomics is the study of behaviour of the whole economy - concerned with the determination of the broad aggregates like the national output, price level and employment. The issues in macroeconomics can be better understood when it's evaluated against microeconomics.	
<b>Item stem + question</b>	Which of the following <b>is</b> a macroeconomic issue?	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	How budget deficit affects interest rates	Part of macroeconomics since budget deficit and interest rates affect the economy as a whole.
<b>Distractor 1</b>	The cause of decline in the price of peanut butter	Part of microeconomics since deals with an individual commodity and its price
<b>Distractor 2</b>	What determines amount of good a firm will produce	Part of microeconomics since deals with an individual firm's production

<b>Distractor 3</b>	How a rise in price of sugar affects market for sodas	Part of microeconomics since deals with change in demand for one good due to change in price of another good (cross elasticity)
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### Free Response Question

Chapter	Chapter 1: Introduction	
Essential Idea	Demand for the output in an economy comes from the 4 sectors namely: households, firms, government & the external sector. The participation of each sector depends on the type of economy. It's useful to understand that main body of macroeconomic theory applies to a developed, capitalist economy.	
Item stem + question	“When the competitors are free to enter the market and business are free to innovate, this benefits individual consumers and the overall economy”;  Identify the type of economy from the statement and briefly explain any of its three features.	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	The type of economy is: <b>Capitalist/Free or Market Economy</b>  <b>Features:</b> <ul style="list-style-type: none"><li>• <b>Right to Private Property:</b> This is the essence of capitalism. This right means that private property such as property, factories, machines, etc. can be owned under private individuals and companies.</li></ul>	1 mark for <b>identification</b> and 6 marks (For 3 <b>features</b> )

	<ul style="list-style-type: none"> <li>• <b>Price Mechanism:</b> Price mechanism is like an invisible hand that controls the workings of a capitalist economy. The forces of supply and demand will determine the prices and the level of productions in the economy. The government will not have any interference in this matter.</li> <li>• <b>Profit Motive:</b> The driving force behind any capitalist economy is the profit motive. All companies wish to produce and sell their products to maximize their profits. This also induces healthy competition in the economy.</li> <li>• <b>Freedom of Enterprise:</b> In capitalism, every individual is free to make his own economic choices without any intervention. This includes both the consumers and the producers.</li> </ul> <p>Choose any 3 features out of 4.</p>	
<b>Marking Rubric:</b>		
<b>Part 1</b>	Feature 1 and explanation	2 marks
<b>Part 2</b>	Feature 2 and explanation	2 marks
<b>Part 3</b>	Feature 3 and explanation	2 marks

### Multiple-Choice Question

<b>Chapter</b>	Chapter 2: National Income Accounting	
<b>Essential Idea</b>	National Income is circular in flow and understanding it via different measures like GDP, GNP, PDI etc., helps in gauging the progress and development in an economy.	
<b>Item stem + question</b>	Which of the following will be included to calculate the GDP of USA?	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Famous British singer tours throughout USA for concerts	Within the domestic territory of USA, no matter earned by residents or non-residents, hence included in the GDP
<b>Distractor 1</b>	Cars manufactured by Americans in Germany.	Not within the domestic territory of USA, hence can't be included in USA's GDP
<b>Distractor 2</b>	A singer from USA holding a concert abroad.	Not within the domestic territory of USA, hence can't be included in USA's GDP
<b>Distractor 3</b>	USA citizens receiving unemployment benefits from the govt.	Not included, since it is a transfer payment.

### Free Response Question

Chapter	Chapter 2: National Income Accounting	
Essential Idea	National Income is circular in flow and understanding it via different measures like GDP, GNP, PDI etc., helps in gauging the progress and development in an economy.	
Item stem + question	Explain briefly whether each of the following would cause GDP to overstate or understate the degree of change in the broad standard of living: <ul style="list-style-type: none"><li>• The environment becomes dirtier.</li><li>• The crime rate declines.</li><li>• A greater variety of goods become available to consumers</li><li>• Infant mortality declines.</li></ul>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>A dirtier environment would reduce the broad standard of living, but it would not be counted in GDP, so a rise in GDP would overstate the standard of living.</p> <p>A lower crime rate would raise the broad standard of living, but it would not be counted directly in GDP, so a rise in GDP would understate the standard of living.</p> <p>A greater variety of goods would raise the broad standard of living, but it would not be counted directly in GDP, so a rise in GDP would understate the rise in the standard of living.</p>	8 marks

	A decline in infant mortality would raise the broad standard of living, but it would not be counted directly in GDP, so a rise in GDP would understate the rise in the standard of living.	
<b>Marking Rubric:</b>	State the effect on standard of living and conclude by mentioning if GDP will be understated or overstated.	2
<b>Part 1</b>		marks/part
<b>Part 2</b>	Same for all other parts	
<b>Part 3</b>	Same for all other parts	

### Multiple-Choice Question

<b>Chapter</b>	Ch 3: Money and Banking	
<b>Essential Idea</b>	<b>Money performs various functions in the modern economy &amp; has evolved as a system of trust. In the process, it becomes imperative to learn how money creation takes place by commercial banks &amp; the role of the central bank in controlling the money supply through its policy instruments/tools.</b>	
<b>Item stem + question</b>	The British pound is the national currency of the UK. In Brixton in south London, it is possible to get a distinctively marked currency called the Brixton pound from special cash machines. This can be spent with 150 local shopkeepers. Similar schemes are found in towns in the US, Italy and France. Should Brixton pounds be considered money?	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	yes, because they fulfil all the functions of money	Serves all the 4 functions of money- store of value, medium of exchange, standard of deferred payment and unit of account.
<b>Distractor 1</b>	no, because it is not possible to have two currencies in a country	A country can have more than one currency.
<b>Distractor 2</b>	yes, because some shopkeepers are willing to accept them	This can be one of the reasons why a currency is accepted since it is acceptable but not a conclusive one.
<b>Distractor 3</b>	no, because they are not generally acceptable outside of Brixton	A currency is accepted in a particular country and might not be accepted somewhere else but that does not make it void.

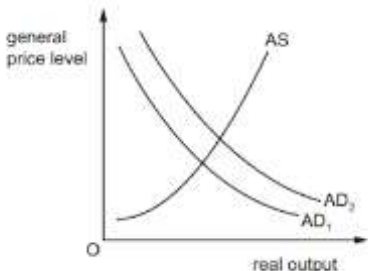


### Free Response Question

Chapter	Ch 3: Money and Banking		
Essential Idea	Money performs various functions in the modern economy & has evolved as a system of trust. In the process, it becomes imperative to learn how money creation takes place by commercial banks & the role of the central bank in controlling the money supply through its policy instruments/tools.		
Item stem + question	‘The U.S. Federal Reserve in December 2021 announced no change in interest rates following its meeting, but did signal concerns about rising inflation’. Based on the statement, answer the questions below:  a.       Why does inflation occur?  b.       Mention three monetary policy tools that can be used to combat this issue while explaining each in brief.		
Sample Answer and Marking Rubric			
Part	Description		Marks
Sample answer	a. Inflation occurs when an economy grows due to increased spending without an accompanying increase in the production of goods and services. When this happens, prices rise and the currency within the economy is worth less than it was before. The currency essentially won’t buy as much as it would before.  b. Monetary policy tools to combat rising inflation are:  1. Reserve Requirements: Increase the reserve requirements on the amount of money banks are legally required to keep on hand to cover withdrawals. The more money banks are required to hold back, the less they have to		6 marks

	<p>lend to consumers. If they have less to lend, consumers will borrow less, which will decrease spending and reduce inflation.</p> <p>2. Open Market Operations: When a central bank wants to reduce the availability of money to the public, it will sell government bonds and securities with the help of commercial banks. This step reduces the money supply in the economy and restricts banks to offer credit to individuals. This keeps a check on inflation by reducing spending in the economy.</p> <p>3. Interest/Bank rates: When the Federal Reserve increases its interest rate, banks then have no choice but to increase their rates as well. When banks increase their rates, fewer people want to borrow money because it costs more to do so while that money accrues at a higher interest. So, spending drops, prices drop and inflation slows.</p> <p>(Note: All the three are contractionary monetary policies to reduce inflation)</p>	
<b>Marking Rubric:</b>	Briefly stating the reason for why inflation occurs (Part a)	1.5 marks
<b>Part 1</b>		
<b>Part 2</b>	(Part b) Monetary policy tool-1	1.5 marks
<b>Part 3</b>	(Part b) Monetary policy tool-2	1.5 marks
<b>Part 4</b>	(Part b) Monetary policy tool-3	1.5 marks

### Multiple-Choice Question

<b>Chapter</b>	Ch-4 Determination of Income and Employment	
<b>Essential Idea</b>	Aggregate Demand and Aggregate Supply are the main tools of macroeconomics that determine the level of output in an economy. The components of AD and AS and their interaction showing $C+I$ ( $AD$ ) = $C+S$ ( $AS$ ) play an important role in finding the equilibrium and taking actions to correct the deviations if any.	
<b>Item stem + question</b>	<p>The diagram shows the aggregate demand (<math>AD</math>) and aggregate supply (<math>AS</math>) curves for an economy</p>  <p>Which situation would not cause a shift from <math>AD_1</math> to <math>AD_2</math>?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	a fall in the general price level as government spending is reduced	Decrease in govt spending would shift the $AD$ curve to the left/downward movement.
<b>Distractor 1</b>	an easing of credit by commercial banks for household purchases of consumer goods	Will increase $AD$ and leads to rightward shift that is $AD_1$ to $AD_2$

<b>Distractor 2</b>	an increase in earnings from exports of high-tech products	Will increase AD and leads to rightward shift that is AD1 to AD2 as export rises
<b>Distractor 3</b>	an increase in investment by firms in computer systems	Will increase AD and leads to rightward shift that is AD1 to AD2 as investment increases which is a part of AD

### Free Response Question

<b>Chapter</b>	Ch-4 Determination of Income and Employment	
<b>Essential Idea</b>	Whether the quantity of output an economy changes is determined by whether the total demand equals the total supply of goods and services. The interaction of these two tools explains the concept of equilibrium & disequilibrium, alongside evaluating the effect on price level and employment/output within the economy.	
<b>Item stem + question</b>	Explain how aggregate demand is likely to be affected by an increase in the money supply and consider whether the impact of such an increase will be on employment or on the general price level.	
<b>Sample Answer and Marking Rubric</b>		
<b>Part</b>	<b>Description</b>	<b>Marks</b>
<b>Sample answer</b>	<p>A money supply increase will lead to increases in aggregate demand for goods and services. This will shift the AD curve to the right. This happens because the increase in money supply will reduce interest rates and make loans cheaper and the reward for saving lower with the result that consumption (C) will increase.</p> <p>A money supply increase will tend to raise the price level in the long run. A money supply increase may also increase national output. A money supply increase will raise the price level more and national output less, the lower the unemployment rate of labour and capital is. A money supply increase will raise national output more and the price level less the higher the unemployment rate of labour and capital is.</p>	6 marks (2+4)

<b>Marking Rubric:</b> <b>Part 1</b>	Candidates need to explain how the increase in the money supply will affect the selected component. For example, if consumption is considered it is expected that candidates will explain that the increase in money supply will reduce interest rates and make loans cheaper and the reward for saving lower with the result that consumption will increase.	2 marks
<b>Part 2</b>	Impact of increase in money supply on employment and general price level with a diagram.	4 marks

### Multiple-Choice Question

<b>Chapter</b>	Chapter 5: Government Budget and The Economy	
<b>Essential Idea</b>	The sources of government revenue and the avenues of government spending are essential tools in understanding the components of Government Budget. It also helps in identifying if the government is spending beyond its means and measures to be taken to correct the same.	
<b>Item stem + question</b>	Direct tax as a part of revenue receipts is a tax which is imposed on:	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Individuals and corporations	Direct tax is imposed on both: person's and corporation's income
<b>Distractor 1</b>	Individuals	It's just one element of direct tax that is income tax on individuals
<b>Distractor 2</b>	Goods and services	It's an indirect tax, example GST, VAT etc.
<b>Distractor 3</b>	Corporations	It's just one element of direct tax that is corporation tax

### Free Response Question

Chapter	Chapter 5: Government Budget and The Economy	
Essential Idea	The sources of government revenue and the avenues of government spending are essential tools in understanding the components of Government Budget. It also helps in identifying if the government is spending beyond its means and measures to be taken to correct the same.	
Item stem + question	How can the government reduce its budget deficit?	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<b>Measures to reduce the budget deficit are:</b> <ul style="list-style-type: none"><li>Increased emphasis on tax-based revenues and appropriate measures to reduce tax evasion.</li><li>Disinvestment should be done where assets are not being used effectively</li><li>Reduction in subsidies by the government will also help reduce the deficit.</li><li>Try and avoid unplanned expenditures.</li><li>A broadened tax base may also help in reducing the government deficit.</li></ul>	6 marks  (Explaining any 3 points)
Marking Rubric: Part 1	Stating and Explaining Point 1	2 marks
Part 2	Stating and Explaining Point 2	2 marks



<b>Part 3</b>	Stating and Explaining Point 3	2 marks
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### Multiple-Choice Question

<b>Chapter</b>	Ch-6: Open Economy Macroeconomics	
<b>Essential Idea</b>	Countries buy and sell goods from/to other countries. We will consider what appears in the account that shows details of a country's economic transactions with other countries. In the process, we will also examine the causes and consequences of changes in a country's exchange rate.	
<b>Item stem + question</b>	<p>There is a rise in the exchange rate of the US\$.</p> <p>Which would cause the greatest increase in the US current account deficit?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	a high price elasticity of demand for imports	imports will become cheaper and since elasticity is high, imports will increase many folds, increasing the deficit
<b>Distractor 1</b>	a low-price elasticity of demand for exports	expensive exports are still in demand and does not reduce much since demand for exports is inelastic, which won't increase the deficit
<b>Distractor 2</b>	a high level of domestic unemployment	high unemployment is same as low inflation, reason same as distractor 1
<b>Distractor 3</b>	a low rate of domestic inflation	high inflation leads to increase in deficit since it makes exports more expensive and imports more competitive, so low inflation won't increase the current account deficit

### Free Response Question

Chapter	Ch-6: Open Economy Macroeconomics	
Essential Idea	Countries buy and sell goods from/to other countries. We will consider what appears in the account that shows details of a country's economic transactions with other countries. In the process, we will also examine the causes and consequences of changes in a country's exchange rate.	
Item stem + question	The government, along with the Reserve Bank of India (RBI), undertook a two-step devaluation of the rupee, which was first devalued against major currencies by around 9 per cent on 1 July 1991, followed by another devaluation of 11 per cent two days later. Discuss if a devaluation helps the economy?	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>A devaluation (depreciation) occurs when the exchange rate falls in value. This causes exports to be cheaper and imports to be more expensive. In theory, it can help increase economic growth, though it may cause inflation.</p> <p>Advantages:</p> <ul style="list-style-type: none"><li>Exports become cheaper and more competitive to foreign buyers. Therefore, this provides a boost for domestic demand and could lead to job creation in the export sector.</li><li>A higher level of exports should lead to an improvement in the deficit. This is important if the country has a large current account deficit due to a lack of competitiveness.</li><li>Higher exports and aggregate demand (AD) can lead to higher rates of economic growth.</li></ul> <p>Disadvantages:</p>	6 marks

	<ul style="list-style-type: none"> <li>Devaluation is likely to cause inflation as imports will be more expensive (any imported good or raw material will increase in price)</li> <li>A large and rapid devaluation may scare off international investors. It makes investors less willing to hold government debt because the devaluation is effectively reducing the real value of their holdings. In some cases, rapid devaluation can trigger capital flight.</li> <li>Reduces the purchasing power of citizens abroad. e.g. it is more expensive to go on holiday abroad.</li> </ul> <p>Evaluation of impact of devaluation:</p> <ul style="list-style-type: none"> <li>It depends on the state of the business cycle – In a recession a devaluation can help boost growth without causing inflation. In a boom, a devaluation is more likely to cause inflation.</li> <li>The elasticity of demand. A devaluation may take a while to improve current account because demand is inelastic in the short term. However, if demand is price elastic, then it will cause a relatively bigger increase in demand for exports.</li> <li>Type of economy. A developing economy which relies on import of raw materials may experience serious costs from a devaluation which makes basic goods and food more expensive.</li> </ul>	
<b>Marking Rubric:</b>	Definition of devaluation	<b>1 mark</b>
<b>Part 1</b>		
<b>Part 2</b>	Advantages and Disadvantages	<b>2+2 = 4 marks</b>
<b>Part 3</b>	Evaluation	<b>1 mark</b>

## INDIAN ECONOMIC DEVELOPMENT

### Multiple-Choice Question

<b>Chapter</b>	Indian Economy on the Eve of Independence	
<b>Essential Idea</b>	On the eve of Independence, all aspects of the Indian economy faced enormous economic challenges, which shaped India's post-Independence development strategy.	
<b>Item stem + question</b>	<p>During the British rule, India became an exporter of primary products such as raw silk, cotton, wool, sugar, indigo, jute etc. and an importer of finished consumer goods like cotton, silk and woollen clothes and capital goods like light machinery produced in the factories of Britain.</p> <p>Why was this a challenge for India's foreign trade?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	India's foreign trade was unbalanced, with important raw materials being exported.	Student understands that India earned much less in export of important raw material than it spent on import of expensive finished goods made from that raw material, leading to a draining of finances.
<b>Distractor 1</b>	India's foreign trade was oriented to feed the Industrial Revolution in Britain.	Student does not understand that this was the cause of the state of India's foreign trade and not a challenge for it.
<b>Distractor 2</b>	Export earnings was used to make payments for the expenses on wars fought by the British government.	Student does not understand that while this was true, it was not a challenge brought on by export of raw material and import of finished goods.

<b>Distractor 3</b>	The agricultural sector accounted for the largest share of the total workforce in India, almost 70-75%.	Student does not understand that this was an occupational structure challenge and not a foreign trade challenge for India.
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### Free Response Question

Chapter	Indian Economy on the Eve of Independence	
Essential Idea	On the eve of Independence, all aspects of the Indian economy faced enormous economic challenges, which shaped India’s post-Independence development strategy.	
Item stem + question	<p>Under the colonial regime, basic infrastructure such as railways, ports, water transport, posts and telegraphs were developed. Yet, on the eve of Independence, India was facing enormous economic challenges partly due to this development of the infrastructural sector.</p> <p>Explain why this was so, supporting your answer with at least examples of 2 infrastructural developments and their effects on the economy.</p>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>It is true that under the colonial regime, India’s basic infrastructure was developed. For example, roads of pre-colonial India were not fit for modern transport. Similarly, the introduction of railways by the British in India was one of their most significant contributions to the country. Yet, India was left with enormous challenges mainly due to the fact that the efforts were made by the colonial regime to improve infrastructure facilities were spiced with selfish motives.</p> <p>While the British built roads fit for modern transport, these connected areas in the countryside where raw materials were extracted to be transported to the nearest port or railway station. This led</p>	-

	<p>to expansion of the volume of India's exports, characterised mainly by the draining of important raw material out of India and to England, its benefits rarely accruing to the Indian people.</p> <p>Similarly, the extensive network of railways developed by the British fostered commercialisation of Indian agriculture, which adversely affected the self-sufficiency of the village economies in India.</p>	
<b>Marking Rubric:</b>		
<b>Part 1</b>	<ul style="list-style-type: none"> <li>Provides a broad reason for the negative economic effect of infrastructural development by the British (Selfish motives of British leading to economic drain in India.)</li> </ul>	1
<b>Part 2</b>	<ul style="list-style-type: none"> <li>Provides 2 clear examples (Roads, railways)</li> </ul>	1
<b>Part 3</b>	<ul style="list-style-type: none"> <li>Explains in detail how the development of each infrastructural facility led to economic challenges (Extraction of raw material, commercialisation of agriculture)</li> </ul>	2



### Multiple-Choice Question

<b>Chapter</b>	Indian Economy 1950-1990	
<b>Essential Idea</b>	India's Five Year Plans from 1950 to 1990 achieved impressive post-Independence progress in the four goals of growth, modernisation, self-reliance and equity.	
<b>Item stem + question</b>	<p>India's agricultural sector was struggling under the British rule. The policy makers of independent India introduced land reforms and promoted the use of 'High Yielding Variety' (HYV) seeds to address the challenges of this sector.</p> <p>Which goals of the Five Year Plans did these strategies target?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Equity and modernisation	Student understands that land reforms abolished the intermediaries to bring in equity, and HYV seeds were a form of new technology to increase crop production.
<b>Distractor 1</b>	Modernisation and growth	Student does not understand that growth requires a larger stock of productive capital, or a larger size of supporting services, which neither strategy brought in.
<b>Distractor 2</b>	Growth and self-reliance	Student does not understand that while HYV seeds promoted self-reliance to an extent, neither strategy promoted growth in any direct manner.
<b>Distractor 3</b>	Self-reliance and modernisation	Student does not understand that while self-reliance was an indirect effect of the Green Revolution, neither was the main goal of land reforms.

### Free Response Question

Chapter	Indian Economy 1950-1990	
Essential Idea	India’s Five Year Plans from 1950 to 1990 achieved impressive post-Independence progress in the four goals of growth, modernisation, self-reliance and equity.	
Item stem + question	<p>After independence, India envisaged an economic system which combines the best features of socialism and capitalism—this culminated in the mixed economy model. The proportion of GDP contributed by the industrial sector increased in the period from 13% in 1950-51 to 24.6% in 1990-91.</p> <p>In terms of industrial development, why do you think the mixed economy model was the right strategy for a newly-independent India? Support your answer with 2 clear reasons.</p>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	The British had left the Indian economy in shambles. As such, Indian industrialists did not have the capital to undertake investment in industrial ventures required for the development of the Indian economy. Under the mixed economy model, the government could have complete control of those industries that were vital to the economy. In this manner, the government played an extensive role in promoting the industrial sector, while also including private industrialists in the industrialisation efforts by creating categories of industries in which the private sector could supplement the efforts of the public sector and also set up industries independently.	-

	Secondly, the mixed economy model enabled development of industries in backward region. Private sector industries were heavily regulated under this model – in this case, no new private sector industry was allowed unless a license was obtained from the government, and it was easier to obtain a license if the industrial unit was established in an economically backward area. This enabled development of the country as a whole as opposed to development only in certain pockets.	
<b>Marking Rubric: Part 1</b>	<ul style="list-style-type: none"> <li>Provides 2 clear reasons in support of the mixed economy model for industrial development (Lack of capital in the private sector, development of backward regions)</li> </ul>	1
<b>Part 2</b>	<ul style="list-style-type: none"> <li>Explains each reason in detail</li> </ul>	3

### Multiple-Choice Question

<b>Chapter</b>	Liberalisation, Privatisation and Globalisation: An Appraisal	
<b>Essential Idea</b>	The New Economic Policy of 1991 introduced stabilisation and structural reform measures in the form of liberalisation, privatisation and globalisation, producing both positive and negative results for the country.	
<b>Item stem + question</b>	<p>The New Economic Policy consisted of wide-ranging economic reforms and policy measures that can broadly be classified into stabilisation measures and structural reform measures.</p> <p>Which of the following can be classified as a stabilisation measure?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	In 1991, the rupee was devalued against foreign currencies.	Student understands that this was a stabilisation measure as it aimed to resolve the balance of payments crisis.
<b>Distractor 1</b>	Import licensing was abolished, except for hazardous industries.	Student does not understand that this was a structural reform measure as it dismantled quantitative restrictions on imports to grow the manufacturing sector.
<b>Distractor 2</b>	Industrial licensing was abolished for almost all but product categories.	Student does not understand that this was a structural reform as it removed restrictions in order to deregulate the industrial sector.
<b>Distractor 3</b>	Areas reserved for the public sector were narrowed down from 17 to 8.	Student does not understand that this was a structural reform aimed at providing greater competitive stimulus to the domestic industry.

### Free Response Question

Chapter	Liberalisation, Privatisation and Globalisation: An Appraisal	
Essential Idea	The New Economic Policy of 1991 introduced stabilisation and structural reform measures in the form of liberalisation, privatisation and globalisation, producing both positive and negative results for the country.	
Item stem + question	<p>Under the New Economic Policy of 1991, liberalisation of trade was initiated to increase international competitiveness of industrial production and also foreign investments and technology into the economy.</p> <p>During the reform period, the growth of the agricultural sector has declined. In what way is liberalisation connected to this decline?</p>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	<p>Before 1991, rules and laws that were aimed at regulating economic activities became major hindrances in growth and development. Liberalisation was introduced to put an end to these restrictions and open up various sectors of the economy.</p> <p>Accordingly, import licensing was abolished and quantitative restrictions on imports of manufactured consumer goods and agricultural products were also fully removed from April 2001. However, this played a role in the decline of the agricultural sector, as removal of quantitative restrictions on imports of agricultural products meant that the domestic markets began to be flooded with cheaper alternatives. Small farmers in India have been unable to keep up with the international competition, and this in turn has led to a decline in the agricultural sector.</p>	

<b>Marking Rubric:</b> <b>Part 1</b>	<ul style="list-style-type: none"> <li>Explains liberalisation reforms specific to agriculture (Removal of quantitative restrictions on imports of agricultural products.)</li> </ul>	2
<b>Part 2</b>	<ul style="list-style-type: none"> <li>Explains how these reforms affected agriculture in India (International competition and competitive prices leading to struggling farmers.)</li> </ul>	2

### Multiple-Choice Question

Chapter	Human Capital Formation in India																																																																							
Essential Idea	Investment in human capital ensures a country of competent, trained and healthy people, increased economic growth and overall human development.																																																																							
Item stem + question	Study the given table. Choose the option that gives a correct analysis based on the data. <div><table><tr><th colspan="6">Educational Attainment in India</th></tr><tr><th>SLNo.</th><th>Particulars</th><th>1990</th><th>2000</th><th>2011</th><th>2017-18</th></tr><tr><td>1.</td><td>Adult Literacy Rate (per cent of people aged 15+)</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>1.1 Male</td><td>61.9</td><td>68.4</td><td>79</td><td>82</td></tr><tr><td></td><td>1.2 Female</td><td>37.9</td><td>45.4</td><td>59</td><td>66</td></tr><tr><td>2.</td><td>Primary completion rate (per cent of relevant age group)</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>2.1 Male</td><td>78</td><td>85</td><td>92</td><td>93</td></tr><tr><td></td><td>2.2 Female</td><td>61</td><td>69</td><td>94</td><td>96</td></tr><tr><td>3.</td><td>Youth literacy rate (per cent of people aged 15+ to 24)</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>3.1 Male</td><td>76.6</td><td>79.7</td><td>90</td><td>93</td></tr><tr><td></td><td>3.2 Female</td><td>54.2</td><td>64.8</td><td>82</td><td>90</td></tr></table></div>						Educational Attainment in India						SLNo.	Particulars	1990	2000	2011	2017-18	1.	Adult Literacy Rate (per cent of people aged 15+)						1.1 Male	61.9	68.4	79	82		1.2 Female	37.9	45.4	59	66	2.	Primary completion rate (per cent of relevant age group)						2.1 Male	78	85	92	93		2.2 Female	61	69	94	96	3.	Youth literacy rate (per cent of people aged 15+ to 24)						3.1 Male	76.6	79.7	90	93		3.2 Female	54.2	64.8	82	90
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	Option		Reason/Explanation for this option																																																																					
Correct answer	The difference in literacy rates between males and females is narrowing.		Student understands that while not equal, the data shows a narrowing trend between literacy rates of males and females.																																																																					

<b>Distractor 1</b>	Literacy rates of children, youths and adults have shown a decrease.	Student does not understand that as per the table, the overall literacy rates have increased from 1990 to 2017-18.
<b>Distractor 2</b>	A higher percentage of adults is literate as compared to younger children.	Student does not understand that primary completion rate is much higher than the adult literacy rate.
<b>Distractor 3</b>	Among youths, males are substantially more illiterate than females.	Student does not understand that even though the difference is narrowing, male youths have higher literacy rates.



### Free Response Question

Chapter	Human Capital Formation in India	
Essential Idea	Investment in human capital ensures a country of competent, trained and healthy people, increased economic growth and overall human development.	
Item stem + question	<p>The National Education Policy (NEP) 2020 states that the world is undergoing rapid changes in the knowledge landscape. With climate change there will be a sizeable shift in how we meet the world’s basic needs, again resulting in the need for new skilled labour, particularly in biology, chemistry, physics, agriculture, climate science, and social science. The growing emergence of epidemics and pandemics will also call for collaborative research in infectious disease management and development of vaccine, and the resultant social issues heightens the need for multidisciplinary learning. There will be a growing demand for humanities and art, as India moves towards becoming a developed country as well as among the three largest economies in the world.</p> <p><i>Source: NCERT</i></p>	
	<p>Based on this, what do you think are 2 ways in which the NEP 2020 will ensure 1) a skilled and productive human capital and 2) economic growth in India?</p>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	Human capital includes competent people who have been educated and trained as professionals. Investment in education is therefore considered one of the main sources of human capital. The NEP 2020 lays emphasis on educating students in higher order skills in biology, chemistry, climate science and so on, as well as collaborative research and development. Such knowledge and skills will	-

	<p>help students in the country grow beyond unskilled work and tasks that can now be done by technology, become skilled and innovate. This is the essence of human capital formation.</p> <p>Economic growth means the increase in real national income of a country. The labour skill of an educated person is more than that of an uneducated person, and the former generates more income than the latter. With a focus on skills and a knowledge economy, skilled students will go on to earn higher incomes and contribute to the economic growth of the country.</p>	
<b>Marking Rubric:</b> <b>Part 1</b>	<ul style="list-style-type: none"> <li>Provides a brief explanation of human capital (Competent and educated people)</li> <li>Draws relevant connections between the NEP 2020 and human capital formation (Focus on skills leading to better educated students)</li> </ul>	2
<b>Part 2</b>	<ul style="list-style-type: none"> <li>Provides a brief explanation of economic growth (Increase in real national income)</li> <li>Draws relevant connections between the NEP 2020 and economic growth (Focus on skills leading to skilled workers leading to higher income generation)</li> </ul>	2

### Multiple-Choice Question

<b>Chapter</b>	Rural Development
<b>Essential Idea</b>	The development of rural areas is crucial for India's overall development and must focus on the crucial aspects of rural India including credit and marketing systems, agricultural diversification and the role of organic farming in promoting sustainable development.
<b>Item stem + question</b>	<p><b>Microcredit as a Means of Fighting Poverty</b></p> <p>Grameen Bank was founded on the principle that loans are better than charity to interrupt poverty: they offer people the opportunity to take initiatives in business or agriculture, which provide earnings and enable them to pay off the debt.</p> <p>By establishing Grameen Bank in 1983, Muhammad Yunus sought to realise his vision of self-support for the very poorest people by means of loans on easy terms. The bank has since been a source of inspiration for similar microcredit institutions in over one hundred countries.</p> <p>Banks in the traditional system have been reluctant to lend money to anyone unable to give some form or other of security. Grameen Bank, on the other hand, works on the assumption that even the poorest of the poor can manage their own financial affairs and development given suitable conditions, providing small, long-term loans on easy terms.</p> <p>Sources: <a href="https://www.nobelprize.org/prizes/peace/2006/grameen/facts/">https://www.nobelprize.org/prizes/peace/2006/grameen/facts/</a>, The Norwegian Nobel Institute  <a href="https://en.wikipedia.org/wiki/Grameen_Bank">https://en.wikipedia.org/wiki/Grameen_Bank</a></p> <p>Why are banks like Grameen Bank considered favourable for rural development?</p>

	Option	Reason/Explanation for this option
<b>Correct answer</b>	They provide the poorest of the poor access to capital to start a business and work toward financial independence.	Student understands that small businesses and financial independence in rural areas will lead to development.
<b>Distractor 1</b>	They lend to small and marginal farmers and landless labourers at high interest rates, ensuring that rural banks earn well.	Student does not understand that development of rural banks at the cost of development of small farmers does not lead to rural development and is not the aim of microcredit programmes.
<b>Distractor 2</b>	They require borrowers to provide collateral, which ensures that the borrowers work hard and are more productive.	Student does not understand that microcredit programmes are usually for those who cannot give a form of security, and a collateral is a form of security.
<b>Distractor 3</b>	They enable the rural poor to borrow sums of money to spend on day-to-day requirements and consumption purposes.	Student does not understand that microcredit is provided usually as capital to start or grow small businesses and not for personal consumption.

### Free Response Question

Chapter	Rural Development	
Essential Idea	The development of rural areas is crucial for India’s overall development and must focus on the crucial aspects of rural India including credit and marketing systems, agricultural diversification and the role of organic farming in promoting sustainable development.	
Item stem + question	<div><p>The report of the ‘Situation Assessment of Agricultural Households and Land and Holdings of Households in Rural India 2019’ released by the National Statistical Office in September 2021 reveals the pathetic income level of Indian farmers.</p><p>The picture is deplorable in most States when one looks at the income from the source of crop production. Only in five States, the crop income share is more than 50 per cent in the total monthly income of agricultural households. In 16 out of 28 States, the crop income share is less than 40 per cent in the total monthly income. What is more shocking is that the share of crop income is less than 25 per cent in nine States.</p><p>Source: <a href="https://www.thehindubusinessline.com/opinion/why-farm-income-in-india-is-so-low/article37075687.ece">https://www.thehindubusinessline.com/opinion/why-farm-income-in-india-is-so-low/article37075687.ece</a></p></div> <div><p>Based on this, explain in detail how “diversification into productive activities” will contribute to rural development, using 2 examples of diverse activities.</p></div>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	The report of the ‘Situation Assessment of Agricultural Households and Land and Holdings of Households in Rural India 2019’ shows us that there is great risk in depending exclusively on farming for livelihood. Expansion	-

	<p>into other sectors is essential to provide stability, supplementary gainful employment and higher levels of income for rural people to overcome poverty and other tribulations.</p> <p>Animal husbandry is an allied productive activity that provides increased stability in income, food security, transport, fuel and nutrition for the family without disrupting other food-producing activities.</p> <p>Another example of a non-farming productive activity is horticulture. In fact, economic conditions of many farmers engaged in horticulture has improved, and activities such as nursery maintenance, propagation of fruits and flowers, and food processing are highly remunerative employment options, especially for women in rural areas.</p>	
<b>Marking Rubric:</b>		
<b>Part 1</b>	<ul style="list-style-type: none"> <li>Explains how diversification will contribute to rural development (There is great risk in depending exclusively on farming; diversification will provide stability and more income.)</li> </ul>	1
<b>Part 2</b>	<ul style="list-style-type: none"> <li>Provides 2 relevant examples of diverse activities (Animal husbandry, fisheries, horticulture)</li> </ul>	2

### Multiple-Choice Question

<b>Chapter</b>	Employment: Growth, Informalisation and other Issues	
<b>Essential Idea</b>	Employed workers are those who are engaged in economic activities, which are activities that contribute to the Gross National Product.	
<b>Item stem + question</b>	<p>Employed workers are those who are engaged in economic activities, which are activities that contribute to the Gross National Product.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>We know that the total money value of all final goods and services produced in a country in a year is called its Gross Domestic Product for that year. When we also consider what we pay for our imports and get from our exports we find that there is a net earning for the country which may be positive (if we have exported more in value terms than imported) or negative (if imports exceeded exports in value terms) or zero (if exports and imports were of the same value). When we add this earning (plus or minus) from foreign transactions, what we get is called the country's Gross National Product for that year.</p> <p><i>Source: NCERT</i></p> </div> <p>Which statement best explains the concept of Gross National Product?</p>	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	Business Standard defines it as an estimate of the total value of all the final goods and services turned out in a given financial year by the means of production owned by a country's residents.	Students understand GNP to be the total value of goods produced and traded by a particular national both domestically and abroad.

	It also measures the output generated by a country's businesses or individuals who are located domestically or abroad.	
<b>Distractor 1</b>	Economic Times defines it as the monetary value of all the final goods and services produced in a specific time period in a particular country.	Students does not understand the difference between GDP and GNP.
<b>Distractor 2</b>	Eurostat defines it as output (at basic prices) minus intermediate consumption (at purchaser prices); it is the balancing item of the national accounts' production account.	Student does not understand the role intermediate consumption has to play in defining GNP.
<b>Distractor 3</b>	OEDC defines it as gross national income minus the depreciation of fixed capital assets over time through wear and tear due to usage as well as obsolescence.	Student does not understand that GNP is measured based on output and not the input based on fixed assets.
<p><i>Sources:</i></p> <p><a href="https://www.business-standard.com/about/what-is-gross-national-product-gnp">https://www.business-standard.com/about/what-is-gross-national-product-gnp</a></p> <p><a href="https://economictimes.indiatimes.com/definition/gross-domestic-product">https://economictimes.indiatimes.com/definition/gross-domestic-product</a></p> <p><a href="https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Gross_value_added">https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Gross_value_added</a></p> <p><a href="https://data.oecd.org/natincome/net-national-income.htm">https://data.oecd.org/natincome/net-national-income.htm</a></p>		



### Free Response Question

Chapter	Employment: Growth, Informalisation and other Issues	
Essential Idea	Government initiatives to generate employment opportunities, especially in rural areas, have been necessitated by the fact that in the last few decades, GDP has shown rapid growth without simultaneous increase in employment opportunities.	
Item stem + question	<div>The unemployment rate touched a record 23.52 percent when India was under a nationwide lockdown in April 2020, according to private think tank Centre for Monitoring Indian Economy (CMIE). During April-June quarter in 2020, some 121 million jobs were lost, the most since CMIE started compiling employment data.  Source: <a href="https://www.moneycontrol.com/news/business/national-employment-policy-may-have-sector-specific-job-targets-sources-7776391.html">https://www.moneycontrol.com/news/business/national-employment-policy-may-have-sector-specific-job-targets-sources-7776391.html</a></div> <div>According to you, what is 1 direct measure and 1 indirect measure that the government can implement to ensure that the unemployment rate reduces and remains low in the coming years? Suggest measures keeping in mind that the recurrence of pandemics is a very real possibility.</div>	
Sample Answer and Marking Rubric		
Part	Description	Marks
Sample answer	According to me, the government can invest heavily in bringing internet facilities to 100% of the country and in improving online education, especially higher education. This will give youth from disadvantaged communities to complete their education. In case of future pandemics, these youth will not be completely reliant on physical work but can take up employment that allows them to work from a safe place, like home. This indirect measure by the government will push the Indian workforce towards formalisation.	

	Secondly, the government can directly upskill and employ workers in public sector establishments focused on building and improving healthcare facilities; manufacture, stockpile and transport of essential goods and equipment; and so on. Such measures will help prepare the country for the next pandemic while ensuring that there is immediate employment generation.	
<b>Marking Rubric:</b> <b>Part 1</b>	<ul style="list-style-type: none"> <li>Explains 1 direct and 1 indirect measure to reduce unemployment (Direct—employment in public sector establishments for pandemic preparedness; indirect—upskilling youth for the formal sector.)</li> </ul>	1
<b>Part 2</b>	<ul style="list-style-type: none"> <li>Suggests measures keeping in mind recurring pandemics</li> </ul>	1

### Multiple-Choice Question

<b>Chapter</b>	Environment and Sustainable Development	
<b>Essential Idea</b>	Environment contributes significantly to economic development but reduces in quality due to it, necessitating a path of sustainable development.	
<b>Item stem + question</b>	The environment contributes significantly to economic development but is also affected by it. Which of these is <u>not</u> an effect of the Industrial Revolution on the world environment?	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	The waste generated from the activities have fallen short of the ability of the environment to absorb degradation.	Student understands that waste generated from industries is beyond the absorptive capacity of the environment due to the speed and volume of generation.
<b>Distractor 1</b>	The demand for resources for both production and consumption went beyond the rate of regeneration of the resources.	Student does not understand that resources required by industries are usually non-renewable or very slow to renew.
<b>Distractor 2</b>	The pressure on the absorptive capacity of the environment increased and continues to increase tremendously.	Student does not understand that the absorptive capacity is the capacity to absorb degeneration, which is excessive due to the nature and scale of industries.

<b>Distractor 3</b>	The waste generated from the activities went and continue to go beyond the assimilating capacity of the environment.	Student does not understand that due to the volume and nature of waste generation, our environment has not been able to assimilate it naturally.
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### Free Response Question

Chapter	Environment and Sustainable Development	
Essential Idea	Environment contributes significantly to economic development but reduces in quality due to it, necessitating a path of sustainable development.	
Item stem + question	<p>The Narmada Bachao Andolan (NBA) originated in the 1980s as a protest against the building of dams in the Narmada River, specifically the Sardar Sarovar Project (SSP), the second largest of 30 very massive dams that were part of a larger plan for 3,000 dams in India. The primary rationale for building the dam was to provide irrigation and drinking water, but as a multipurpose dam and canal system, it also produces electrical power.</p> <p>The movement was led by Medha Patkar and was embraced by poor indigenous people who were displaced due to the dam-building. The NBA insisted that those people whose rights to local resources cannot be protected due to development – of a dam, for example – should be compensated as well as resettled. In this way, economic justice is served.</p> <p>Source: <a href="https://www.cambridge.org/core/books/abs/environmental-movements-of-india/narmada-bachao-andolan-nba-save-the-narmada/86B51F094B8028AF70A69A5347DBED39">https://www.cambridge.org/core/books/abs/environmental-movements-of-india/narmada-bachao-andolan-nba-save-the-narmada/86B51F094B8028AF70A69A5347DBED39</a></p> <p>Do you think compensation and resettling is the right way to serve economic justice? Support your answer with a reason and an alternative, keeping in mind the principles of sustainable development.</p>	
Sample Answer and Marking Rubric		
Part	Description	Marks

<b>Sample answer</b>	<p>I think that compensation and resettling may partially serve justice to the poor indigenous people displaced. However, if we keep the principles of sustainable development in mind, justice is not being done to the environment in this case.</p> <p>Dams not only affect, displace or harm human beings but also the local flora and fauna, inundating forests and interfering with the natural flow of water in catchment areas and the river basins. Therefore, compensation and resettlement don't serve justice as natural vegetation and wildlife are lost.</p> <p>The alternative is to tap into non-conventional and renewable sources of energy, like wind energy and solar energy that harm the environment to a lesser degree and can be set up without the need for displacement of indigenous communities.</p>	-
<b>Marking Rubric:</b>		
<b>Part 1</b>	<ul style="list-style-type: none"> <li>States an opinion (I agree / I don't agree / I partially agree)</li> </ul>	1
<b>Part 2</b>	<ul style="list-style-type: none"> <li>Provides a clear and logical reason (Resettlement and compensation do not take into account environmental harm done.)</li> </ul>	1
<b>Part 3</b>	<ul style="list-style-type: none"> <li>Provides a fitting alternative (Use of alternate and renewable sources of energy.)</li> </ul>	1

### Multiple-Choice Question

<b>Chapter</b>	Comparative Development Experiences of India and its Neighbours	
<b>Essential Idea</b>	In an increasingly globalised world with limited economic space, it is important for India to understand the development strategies being pursued by its two important and strategic neighbours – Pakistan and China.	
<b>Item stem + question</b>	Both India and China started their developmental journey within 2 years of each other and have followed a similar planned pattern of development.  What is one of the most striking differences in growth we have seen over the past 70 years between the two countries?	
	<b>Option</b>	<b>Reason/Explanation for this option</b>
<b>Correct answer</b>	China has seen a gradual shift from agriculture to industry to services, while India has seen a direct shift from agriculture to service.	Student understands that the difference in shift from one sector to another signifies a fundamental difference in developmental patterns.
<b>Distractor 1</b>	China introduced structural reforms on its own initiative while they were forced upon India by international agencies.	Student does not understand that both countries were in dire need of structural reform, regardless of who initiated the reform.
<b>Distractor 2</b>	In China, the agricultural sector contributes the highest share of GVA, while in India, the service sector contributes the highest share.	Student does not understand that in both countries, the service sector contributes the highest share of GVA.

<b>Distractor 3</b>	In China, a greater percentage of the workforce is engaged in industry, while in India, the percentage of industrial workforce is low.	Student does not understand that in both countries, the percentage of workforce engaged in industry is more or less the same.
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### Free Response Question

Chapter	Comparative Development Experiences of India and its Neighbours																																																
Essential Idea	In an increasingly globalised world with limited economic space, it is important for India to understand the development strategies being pursued by its two important and strategic neighbours – Pakistan and China.																																																
Item stem + question	<p>Study the following table carefully.</p> <p style="text-align: center;"><b>Some Selected Indicators of Human Development, 2017-2019</b></p> <table><tr><th>Item</th><th>India</th><th>China</th><th>Pakistan</th></tr><tr><td>Human Development Index (Value)</td><td>0.645</td><td>0.761</td><td>0.557</td></tr><tr><td>Rank (based on HDI)</td><td>130</td><td>87</td><td>154</td></tr><tr><td>Life Expectancy at Birth (years)</td><td>69.7</td><td>76.9</td><td>67.3</td></tr><tr><td>Mean years of Schooling (% aged 15 and above)</td><td>6.5</td><td>8.1</td><td>5.2</td></tr><tr><td>Gross National Income per capita (PPP US\$)</td><td>6,681</td><td>16,057</td><td>5,005</td></tr><tr><td>Percentage of People living Below Poverty Line (National)</td><td>21.9*</td><td>1.7**</td><td>24.3*</td></tr><tr><td>Infant Mortality Rate (per 1000 live births)</td><td>29.9</td><td>7.4</td><td>57.2</td></tr><tr><td>Maternal Mortality Rate (per 1 lakh births)</td><td>133</td><td>29</td><td>140</td></tr><tr><td>Population using at least basic Sanitation (%)</td><td>60</td><td>75</td><td>60</td></tr><tr><td>Population using at least basic drinking Water Source (%)</td><td>93</td><td>96</td><td>91</td></tr><tr><td>Percentage of Undernourished Children</td><td>37.9</td><td>8.1</td><td>37.6</td></tr></table> <p><b>Note:</b> * for the year 2011; for the years 2015. <b>Sources:</b> Human Development Report 2019 and 2020 and World Development Indicators (<a href="http://www.worldbank.org">www.worldbank.org</a>); Key indicators for Asia and the Pacific 2019, Asian Development Bank (ADB).</p> <p>Write a comparative analysis and conclusion on health indicators of the three countries, based on the available data.</p>	Item	India	China	Pakistan	Human Development Index (Value)	0.645	0.761	0.557	Rank (based on HDI)	130	87	154	Life Expectancy at Birth (years)	69.7	76.9	67.3	Mean years of Schooling (% aged 15 and above)	6.5	8.1	5.2	Gross National Income per capita (PPP US\$)	6,681	16,057	5,005	Percentage of People living Below Poverty Line (National)	21.9*	1.7**	24.3*	Infant Mortality Rate (per 1000 live births)	29.9	7.4	57.2	Maternal Mortality Rate (per 1 lakh births)	133	29	140	Population using at least basic Sanitation (%)	60	75	60	Population using at least basic drinking Water Source (%)	93	96	91	Percentage of Undernourished Children	37.9	8.1	37.6
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### Sample Answer and Marking Rubric

Part	Description	Marks
<b>Sample answer</b>	<p>All three countries have similar life expectancy at birth, with China performing slightly better than India and Pakistan. Pakistan's infant mortality rate is the highest at 57.2, while China's is the lowest at 7.4. Maternal mortality rate for both India and Pakistan is very high, at 133 and 140 respectively, while that for China is comparatively low at 29. In all three countries, the percentage of population using basic sanitation and basic drinking water source is similar, with China performing better than India and Pakistan. Finally, both India and Pakistan have a high percentage of undernourished children, approximately 38%, while it is much lower for China at 8.1%.</p> <p>This tells us that India and Pakistan have similar health-related challenges, perhaps due to underdeveloped healthcare facilities, especially for the rural poor. Comparatively, China is performing much better and perhaps has lessons for the other two countries to implement to improve healthcare.</p>	-
<b>Marking Rubric:</b>		
<b>Part 1</b>	<ul style="list-style-type: none"> <li>Compares the 3 countries on at least 5 out of the 6 parameters (Life expectancy at birth, infant mortality rate, maternal mortality rate, basic sanitation, basic drinking water source, undernourishment)</li> </ul>	1
<b>Part 2</b>	<ul style="list-style-type: none"> <li>Interprets and analyses the data correctly</li> </ul>	3
<b>Part 3</b>	<ul style="list-style-type: none"> <li>Writes a logical and balanced conclusion, based on the data</li> </ul>	1

### 13. REFERENCE DOCUMENTS

1. Position paper: National focus group on teaching Social Studies, NCERT 2006
2. CBSE Draft Learning Objectives.
3. National Curriculum Framework, NCERT 2005
4. Economics Curriculum Document, NCERT
5. NCERT Class 11 Economics Textbook
6. NCERT Class 12 Economics Textbook

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#### About Educational Initiatives:

Educational Initiatives (Ei) is working with the vision of creating a world where children everywhere are learning with understanding.

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